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ABSTRACT.

An examination of the nine institutions that comprise the State University System of Florida attempted to: (1) determine the instructional and instructional-related productivity and the overall utilization of faculty resources as influenced by the size, mission, and complexity of individual institutions, and by the level and discipline of the instructional activity; (2) examine the size of classes as related to the productivity of faculty resources among the institutions, disciplines, and levels; (3) investigate some of the significant characteristics of the "production function" for instructional and related activities; (4) test the utility of the HEGIS discipline classifications as the basis for measuring and comparing faculty productivity, and for the allocation of resources; (5) determine the longer-term changes in faculty productivity, and the differential shifts between disciplines and institutions; (6) evaluate the resource allocation model currently employed in the State University System; and (7) provide the basis for interpreting and assessing the cost, or expenditure, approach to the measurement of resource utilization that is currently being developed for the system. (Author)

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INSTRUCTIONAL PRODUCTIVITY AND THE
UTILIZATION OF FACULTY RESOURCES
IN THE STATE UNIVERSITY SYSTEM OF FLORIDA

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FOREWORD

Among the responsibilities of the Institute of Higher Education at the University of Florida is one of encouraging the scientific study of the management of higher education in the state of Florida. All too often discussions regarding management have been made as a result of crisis and problems of the moment--often based on inadequate study and/or limited data. This has been true not only in Florida but also in other states.

Dr. Lassiter has brought together in this monograph his own expertise as an economist and his own experience as a university administrator. This combination produces an analysis which needs to be examined critically and discussed intelligently. His study follows nationwide directions in defining the data, in analyzing the varied elements of higher education costs, and in adapting the science of cost analysis to an educational milieu.

The Institute of Higher Education is pleased to provide this monograph as a study to be examined and hopefully to serve the most useful purpose of improving the quality of higher education in Florida's State University System.

As he states in his own Preface, Dr. Lassiter claims full responsibility for the judgments, conclusions, methodology, and evaluations. We are pleased to make his scholarly efforts available for others to examine.

JAMES L. WATTENBARGER
Director, Institute of Higher Education

PREFACE

The author's concern with the allocation and utilization of resources in higher education is derived from his responsibilities as an academic administrator and professional interest as an economist. As a long-term member of the Planning-Programming-Budgeting Committee of the State University System of Florida, the author has been a participant in the deliberations leading to the development and refinement of the System's resource allocation model and the supporting data systems. The development of the resource allocation model and its supporting elements was a long and arduous process which took place largely in the "heat of battle," with little time for reflection on its consistency or its impact. It became the author's conviction that further analysis was necessary before it could be concluded that the primary objective of comparable funding for comparable programs was being realized. This study is an attempt to analyze faculty resource allocation and utilization in the System in order to provide the basis for understanding what was taking place and proposing modifications where necessary. The report does not represent the official views of the Board of Regents, the University of North Florida, or of the University of Florida. The judgements, conclusions, methodology, and evaluations are those of the author.

Many persons assisted in the conduct of this study. Contributions requiring singular recognition are: Dr. W. K. Boutwell, President of MGT, Inc., and former Vice Chancellor for Administrative Affairs of the State University System of Florida, for his constructive comments on the manuscript and for verification of the undocumented historical elements of the study; Mr. C.

D. Bullock, Director of Analytical Studies of the University of North Florida, for coordinating the massive data assembly and programming efforts; Dr. J. K. Caruthers, Director of Planning and Analysis of the State University System of Florida, for his assistance in making the data tapes available; Mr. M. L. Casbeer, Director of Records and Registration of the University of North Florida, for his many efforts in analyzing preliminary output, and in critiquing and developing programs; Dr. C. P. Heaton, Associate Professor of Business Communication and English of the University of North Florida, for his critical editorial assistance; Ms. D. P. Williams, Assistant Director of Libraries of the University of North Florida, for her invaluable assistance in the assembly of bibliographic materials; and the staffs of the Instructional Communications department and the Office of the Vice President and Dean of Faculties for diligent efforts in the production of this report. To all of these persons, and to many others, I am grateful.

RLL, Jr.

Jacksonville, Florida
June, 1976

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SUMMARY AND CONCLUSIONS

The overall objective of this study was to investigate the physical productivity and utilization of faculty resources in the State University System of Florida as influenced by the size and mission of the individual institution, the level of instruction, the size of classes, and the discipline. In addition, attempts were made to establish and assess longer-term changes in faculty productivity, the differential impact of these changes among institutions and disciplines, and the efficacy of the total and component parts of the faculty resource allocation model employed in the System. Inadequacy of the data base precluded establishment of productivity ratios in Research and Scholarly activity, Public Service, and Academic Administration. Analysis for these activities was limited to the proportions of total faculty effort devoted to these "tasks."

Before proceeding to the findings of the study, two cautions are in order. First, efficiency in a production relationship can be defined only when the costs of the inputs and the value of the output are known for a given quality product. Second, before interinstitutional comparisons can be unqualifiedly made, considerable information must be available regarding institutional size, institutional role and scope, and discipline mix and level. These cautions are appropriate for interpretation of both the physical ratios and cost data, when available.

Given these qualifications, the more significant findings and conclusions of the study are outlined as follows:

1. There are significant variations in average instructional productivities among the institutions in the System, even for given disciplines and levels. The System average productivities represent a weighted "consensus" of historical decisions and present priorities, and are dominated by the larger institutions. The variations in overall instructional productivities among institutions are, in fact, attributable to a host of factors such as the discipline and level mix of the institutions, assigned roles and scopes, internal institutional priorities among disciplines and between instruction and other activities, historical staffing patterns, and the size of institutions.
2. Average instructional productivities in the System have increased significantly in the past few years and over the long term. From 1972-73 to 1974-75 overall instructional productivities increased approximately 10 percent at the lower level, 15 percent at the upper level, two percent at the beginning graduate level, and 22 percent at the advanced graduate level. Over the 20-year period 1953-54 to 1974-75, System average productivity increased 72 percent at the lower level and 99 percent at the upper level. Few American industries could match these productivity gains.
3. A substantial part of the productivity gains is attributable to the newer institutions, which typically realize higher overall productivity than the older universities, and, more recently, to exceptionally large increases in average productivity in a few major disciplines such as Business/Management and Psychology.

4. For those disciplines and levels that are common to all institutions in the System there is no apparent relationship between institutional size and average productivity or in average class size achieved among the disciplines. On the other hand, there is a tendency for an institution's ranking in average productivities in the various disciplines to vary with its ranks in mean class sizes.
5. The variations among the institutions in average instructional productivities and class sizes for given disciplines and levels are so great as to create considerable doubt regarding the utility of the HEGIS discipline categories as the basis of measuring productivity and cost, or for allocating resources. Intuitively, it would be expected that the traditional pedagogies of the disciplines would result in explainable differences in average productivity and class size. However, the practice among the nine universities in the System is such that this expectation is not realized. Among the disciplines and levels common to all institutions, only in the Fine and Applied Arts and Physical Sciences can a weak case be made that the average instructional productivity and class sizes vary from those realized in the other major disciplines. On the other hand, the case for level differences is much stronger, both theoretically and in practice.
6. The significant differences between the characteristics of frequency distributions of class sizes among the institutions in the System for given levels and disciplines are strongly suggestive of substantial

variances in the degrees to which curricula are proliferated. In adjusting the frequency distributions of class sizes, it was necessary to read the course description of every course listed in the 1974-75 catalogs of the nine institutions, in order to identify and eliminate courses that were not offered in a classroom or laboratory format. The impressions gained from this reading of course descriptions and subsequent examination of the frequency distributions of class sizes lead the author to the conclusion that the most significant inefficiency in the utilization of faculty resources in the System is attributable to proliferated curricula in some programs and at some institutions.

7. The effects of institutional size, internal priorities, and assigned role and scope are apparent in the proportions of faculty resources utilized in Instruction and Instruction-related Activity, Research and Scholarly Activity, Public Service, and Academic Administration. The proportions of faculty resources devoted to Instruction and Instruction-related activities and Academic Administration vary inversely with institutional size. The percentages of faculty resources devoted to Research and Scholarly Activity and Public Service, vary directly with the size of institution and role and scope. As would be expected, the large institutions with doctoral programs dominate the research efforts of the System. On the other hand, it is the author's judgement that the proportions of faculty resources devoted to research at the smaller institutions are so low as to impair

faculty capabilities and vitality if sustained at these levels over a period of time.

8. The proportions of faculty effort devoted to Research and Scholarly Activity vary substantially among the disciplines. However, based on the nature of the commitments made at the institutions in existence in the immediate post-sputnik era, there were some surprises in the rankings among the disciplines in terms of total research efforts. For example, Social Science and Business and Management ranked among the top four disciplines in terms of the total FTE faculty positions devoted to research. Business and Management ranked this high largely because of the commitment of resources to the discipline at the University of Florida. The Systemwide commitment of faculty resources to research in Social Science was heavily influenced by the research efforts at Florida State University in this discipline.

9. Any comparison of instructional productivity or class sizes over time, or among institutions at a given time, must deal with the quality of the educational experience which students receive. (Typically, it is implicitly assumed that quality is constant.) It is, of course, very difficult to measure the quality of an educational experience, although there have been attempts. Most research studies indicate that there is no significant relationship between class sizes (and the derived productivity) and that which is "learned" from the class. However, these studies do not treat the dimensions of the overall

educational experience which are not "learned" and then "regurgitated." Specifically, the enduring elements (and thus the quality) of an educational experience are the ability to think creatively, to communicate effectively, to conceptualize, and to interrelate.

The author would maintain that there has been an absolute decline in the quality of educational experience offered in the State University System of Florida which has accelerated in the past few years, particularly in some disciplines and at the newer institutions.

It is granted that this position cannot be conclusively proved. However, the author believes that such a conclusion can be logically supported. The major bases of this support are as follows:

- a. In order for the educational experience to enhance significantly the capabilities identified above with a quality education, a student must be called on to search, assimilate, synthesize, and effectively communicate the rationale, the process followed, and the findings. For the process to be of value, there must be substantial interaction between the student and the professor, and among the students. Vital components of the teaching process are assignments, examinations, and critiques which sharpen the student's analytic abilities and communications skills. At the instructional productivities currently being realized at the undergraduate level, and particularly in some disciplines such

The reader will note that these capabilities are the ones which are most discussed in outlining the limitations of today's college graduates.

as Business and Management and Psychology, it would be physically impossible for a faculty member to assign, critique, and grade any significant number of term papers, reports, or examinations which were intensively utilized as teaching devices.

Casualties of the "productivity crunch" have been the term paper, oral reports, essay examinations, and individualized critiques of performance.

b. Production theory, which is verified in practice, indicates that long-term increases in the productivity of one factor of production for a given quality product can be achieved and maintained only by substitution among the factors of production or increasing the quality of the factors. Long-term increases in the labor productivity in industrial production have occurred primarily because of the increasing ratio of capital equipment to labor (substitution), and secondarily because of increases in the quality of labor (training and education). In the service industries, of which the health professions are the classic example, the productivity of the expensive grades of labor (such as physicians) has been enhanced by the substitution of less expensive grades of labor (such as Physical Therapists, Physician's Assistants, etc.) and by the increased utilization of capital equipment. When the long-term "production processes" in the State University System are examined, it is evident that

there has been a decline in real support dollars for instruction² and there has been no increase in personnel supporting instruction. In reality, there has been a decrease in the effective quantity of support personnel available to instruction as the burden of externally imposed requirements for record keeping, and paper work generally, has mushroomed. Examples of these externally imposed requirements would be the increased record keeping and reports arising from imposition of the Federal Wage and Hour Law, Equal Opportunity-Affirmative Action, the "12-hour law" of the Florida Legislature, the increasingly cumbersome processes of handling faculty grievances, the Administrative Procedures Acts, and the Occupational Safety and Health Act, to name a few. Finally, almost no resources are available, or are committed, to the improvement of faculty capabilities as teachers, as contrasted to the situation in industry where training and enhancement of the capabilities of employees is accorded some priority.

Based on the reasons given in a. and b. above, the author can only conclude that the quality of education at the undergraduate level has declined. In some disciplines it may be the result of deliberate

2

Attitudes by state administrators and legislators toward instructional support dollars are typified by the fact that requests for funds for audio-visual support of instruction are among the first reduced and are reduced proportionately more than other categories, even in the face of rising class sizes and productivities which would seem to mandate increased audio-visual support in order to maintain quality.

priority decisions at the larger institutions. For example, at one institution the upper level productivity in Psychology would indicate a student-teacher ratio of approximately 52 to 1 and at another institution the upper level productivity in Business and Management yielded a student-teacher ratio of 40 to 1. Student-teacher ratios of these magnitudes would probably be seriously questioned by the appropriate professional accreditation agencies.

10. Before moving to a criticism of the resource allocation model which has been employed in the State University System of Florida, it may be helpful to briefly review its purpose and the conditions under which it was developed, altered, and employed. The model was developed to overcome the past deficiencies and inequities which resulted from the "logrolling" and "pork barrel" attributes of past allocation of resources among the institutions. It represents an attempt by the Board of Regents to assert the role prescribed for the Board in the Florida Statutes with the concurrent objectives of providing equality of funding for comparable programs, and tailoring funding to the roles and scopes of the individual institutions. While the use of the model has resulted in a partial achievement of these objectives, the press of day-to-day responsibilities of the Board staff, and abrupt changes in instructions from the Legislature have precluded serious analysis of the model to correct deficiencies. The model has a logical base which should be retained. However, the weaknesses identified below must be addressed if the objective of

equitable funding is to be realized.

As the model has evolved and been utilized, it is a rather curious blend of sophistication, attempts to achieve equality of treatment and objectivity, and contradictions, many of which are economic in character, or which have been directly injected into the allocation process. Some of the more significant of these contradictions are identified as follows:

- a. The linear model gives no recognition to the joint production phenomena among levels of instruction and/or faculty "tasks" or to economies of scale, even though the influences of both are logically obvious and have been demonstrated in other studies. Furthermore, the model assumes a sectoral linear relationship between student credit hours and full-time equivalent faculty positions. This study raises significant questions about the validity of this assumption.
- b. The model is completely circular in that it extrapolates the last time period's productivity ratios into the future, whether appropriate or not. In addition, as a weighted "consensus" of what transpired, the resource allocation adjustments made by the larger institutions influence what the smaller universities receive.
- c. The model is non-economic in that it "rewards" discipline categories in which there are relative declines in productivity and penalizes those disciplines in which there are relative increases in productivity, irrespective of the reasons for the productivity

changes. The model, coupled with past legislative ~~and~~ ^{and} appropriation practice, also provides no incentives for increased efficiency. For example, assume that the use of para-professional support positions or instructional technology would provide a more efficient use of faculty resources. The productivity of faculty resources would increase. However, in the next budget allocation the number of faculty positions would be reduced, and the number of support positions and dollars for expense and equipment would fall in a direct, linear fashion, so that the use of the innovation could not be sustained.

- d. The model sets priorities and allocates resources among the disciplines and tasks in an unconscious manner without regard to System priorities or the individual roles and scopes of the separate institutions. In fact, there has never been an attempt to set Systemwide priorities or transmit clear signals regarding statewide priorities, except through minimal special allocations.³
- e. The model does not explicitly provide resources for research and development in instruction. This is contrary to the industrial

3. A good example followed the 1975 legislative session in which legislative intent explicitly indicated that resources were to be allocated within the System so as to achieve quality programs in the following order of priorities: upper level instruction; lower level instruction; beginning graduate programs; advanced graduate programs; and all other programs (see page 20 of SB 1343, 1975 General Appropriation Act.) The procedure followed within the System was to allocate resources essentially based on the 1974-75 allocation with instructions to the institutions to comply with the priority statement. Even with complete compliance by the institutions it can be shown that the System is not in compliance with legislative intent.

example where considerable resources are provided to increase the efficiency of the production processes.

f. Since the early 1970's the model has operated with a "no-loss" constraint for some institutions. With such a constraint, unequal workloads are imposed on the remainder of the institutions in the System.

11. The significant variations in average productivity among institutions, disciplines and levels are indicative of the results which may be expected in the cost, or expenditure, study which is currently underway. There will be differences in cost which will be inexplicable without reference to the nature of the underlying physical relationships. Costs are, after all, but the dollar image of the physical production function. The variances in cost, which the author expects, will be attributable to a host of factors: joint production phenomena, economies of scale, institutional priorities, the total availability of resources, historical staffing problems, etc.

12. Finally, there is a continuing problem in the utilization of data contained in the data tapes of the State University System of Florida, particularly when it is desired to make inter-year comparisons. This problem has to do with changes in definitions arising out of: (1) the manner in which enrollments in graduate classes, or enrollments by graduate students are counted and funded; and (2) adjustments to the "tasks" contained in the Faculty Activity Assignment/Report system. Over the period 1972-73 -- 1975-76 at least three fundamental changes in definitions in the Student Data Course file, and one basic

change in definitions in the Academic Assignment file were made without providing the capability of an inter-year "cross walk." These changes made it extremely difficult to adjust the data to provide for meaningful comparison of instructional productivities, or to relate class sizes to instructional productivities between years. The definitional changes also complicate the problems inherent in establishing and comparing cost data. If it is considered desirable to provide the capability for inter-year comparisons of enrollments, instructional productivities, or costs, and the author believes that it is, then definitions must be fixed, cross-walk capability provided, or parallel data systems maintained.

Instructional Productivity and the Utilization of Faculty Resources in the State University System of Florida

INTRODUCTION

Accountability and Productivity - In recent years the significant increases in costs in higher education coupled with the increasing demands for other public services have led to pressure for "accountability." Implicit in most criticisms of resource use in higher education is the notion that if resources were somewhat better allocated and/or productivity increased, the costs of education would fall, or at least not continue to rise as rapidly.

Because faculty salaries comprise the major element in educational costs, attention has been specifically focused on faculty productivity. It has been suggested that faculty instructional productivity could be significantly increased by: (1) adjustments in class sizes and teaching loads; (2) alteration of the modes of instruction; (3) greater use of instructional technology; and (4) diverting resources from research, service, and administration to teaching. Paradoxically, the clamor for increased faculty productivity has been accompanied by significant criticism of the quality of education and its products, and the increasingly impersonal nature of the educational process.

Measuring Productivity and the Utilization of Faculty Resources - The desire for relatively sophisticated measurement of productivity in higher education is a recent phenomenon. A review of the literature pre-dating the 1960's reveals that the terms "output," "outcome," or "productivity" were rarely used in connection with educational resource management. Traditionally,

the only quantitative expressions of the productivity or utilization of faculty resources were the venerable student-teacher ratio and the average weekly hours which faculty members devoted to the various tasks which comprise the total responsibility of the faculty.¹ In the 1960's and 1970's efforts have been made to deal more explicitly with faculty productivity and utilization. These efforts are exemplified by those of the institutional research officers of universities and university systems, the Ford Foundation Program for Research in University Administration located at the University of California at Berkeley, and the National Center for Higher Education Management Systems located with the Western Interstate Commission for Higher Education.² Collectively, these efforts are largely developmental. The most significant remaining impediments to adequate analysis of resource management are: (1) the lack of an adequate data base with definitions which are common to a significant number of institutions; and (2) the problems inherent in quantitatively measuring and expressing the outputs of the non-profit, multi-product, modern university.³

¹ See, for example, Fred C. Ayer, "How the Teaching Load is Handled in State and Other Universities," The Nation's Schools, Vol. 11, No. 6, June, 1929, or Robert O. Baker, "The Faculty Service Load," American Association of Collegiate Registrars, Journal, 18, October, 1942, pp. 57-65.

² See Appendix 3, Selected Bibliography, for typical studies by these groups.

³ See, for example, Robert A. Wallhaus, "The Many Dimensions of Productivity," in Robert A. Wallhaus, ed., Measuring and Increasing Academic Productivity, Washington: Association for Institutional Research, No. 8, Winter, 1975, pp. 1-16, and Donald V. T. Bear, "The University as a Multi-Product Firm," in Keith G. Lumsden, ed., Efficiency in Universities: The La Paz Papers, New York: ELSEVIER Scientific Publishing Company, 1974.

II OBJECTIVES OF THE STUDY

The objectives of the overall study are to: (1) determine the instructional and instructional-related productivity and the overall utilization of faculty resources in the nine institutions comprising the State University System of Florida as influenced by the size, mission, and complexity of the individual institutions, and by the level and discipline of the instructional activity; (2) examine the size of classes as related to the productivity of faculty resources among the institutions, disciplines, and levels; (3) investigate some of the significant characteristics of the "production function" for instructional and related activities; (4) test the utility of the HEGIS discipline classifications as the basis for measuring and comparing faculty productivity, and for the allocation of resources; (5) determine the longer-term changes in faculty productivity, and the differential shifts between disciplines and institutions; (6) evaluate the resource allocation model currently employed in the State University System; and (7) provide the basis for interpreting and assessing the cost, or expenditure, approach to the measurement of resource utilization which is currently being developed for the System.

III DEFINITIONS AND DATA SOURCES

Faculty Productivity and Utilization - It is relatively easy to identify the inputs in the educational process. However, in establishing a productivity

HEGIS (Higher Education General Information Survey) discipline categories represent a taxonomy of programs in higher education as developed by the U. S. Office of Education.

ratio it is necessary to define the outputs also. The data base of the State University System of Florida provides for no measures of output in functions other than instruction and instruction-related activities. Therefore, productivity ratios will be developed only for instructional-type activities. The analysis of the other major functions (research, public service, etc.) will be limited to the utilization (inputs) of faculty resources in these activities. The productivity in instruction will be expressed as the ratio of student credit hours over three quarters to the sum of full-time equivalent faculty positions committed to instruction in each of the three quarters. The productivity in instruction-related activities (defined here as academic counseling) will be expressed as the ratio of full-time equivalent students to full-time equivalent faculty positions utilized in this task per quarter. The utilization of faculty resources in other tasks will be described in terms of full-time equivalent faculty positions committed to these tasks. It should be emphasized that none of the measures employed deal with the measurement of quality of education received or of the quality in the performance of tasks.

⁵ Alternative measures would be degrees produced per full-time equivalent position, student contact hours per full-time equivalent position, faculty salary dollar expenditure per student output, or at the extreme, cost of the added income of the graduates. Student credit hours were selected as the output measure for the following reasons. (1) Student credit hours are the basis for the current allocation of resources in the State University System. (2) A one- or two-year statement of degrees produced would understate the productivity when rapid growth is taking place, particularly at the new institutions. (3) The urban institutions have many non-degree students seeking teacher certification, professional enhancement, or cultural enrichment. (4) The data systems are currently unable to produce reliable estimates of student contact hours. (5) Adequate expenditures or cost data are not currently available. (6) Only the sketchiest data are available to estimate the added incomes of the graduates of the institutions, particularly by institutions and by disciplines.

Data Sources - The data employed are taken from the Academic Assignment File and the Student Data Course File of each institution in the State University System of Florida. The Academic Assignment File is derived from the Faculty Activity Assignment/Report system, which allocates faculty effort among the following tasks: Instruction, Academic Counseling, Research and Scholarly Activity, Public Service, and Academic Administration (including governance).⁶ Faculty Activity Assignment/Reports are jointly completed by the faculty member and the department chairperson and are "time free" in that the proportion of total effort devoted to each task is reported. The Academic Assignment Files were first available for all institutions in the System for a complete academic year in 1974-75. An examination of the literature leads the author to the belief that this is the first instance in higher education in the United States in which data such as contained in the Academic Assignment File were available for a significant number of institutions on a comparable basis.

The Student Data Course File contains information on enrollments by course, credit hours, HEGIS discipline, level of course, and level of the student classification.

An Overview of the State University System - It may be helpful to briefly sketch some of the significant dimensions of the institutions comprising the State University System of Florida. In 1974-75 the Educational and General components of the institutions ranged in enrollment and faculty staffing

6

See Appendix 1 for a discussion of the Faculty Activity Assignment/Report System and data quality.

from 23,052 FTE students and 1,563 FTE faculty at the University of Florida to 2,696 FTE students and 169 FTE faculty at the University of North Florida (see Table 1). There are similar variations in the complexity and variety of programs among the institutions. The University of Florida and Florida State University offer a broad range of programs from the freshman through the doctoral levels, while four institutions offer work only at the upper undergraduate and beginning graduate levels. Altogether, the Educational and General components of the System institutions enrolled 86,180 FTE students and utilized 5,700 FTE faculty positions in the 1974-75 academic year (again see Table 1). In addition, three of the institutions have substantial contract and grant components and/or large special budgetary units which provide for additional faculty staffing and/or enrollments.

IV

INSTRUCTIONAL PRODUCTIVITY

Overall Instructional and Instruction-Related Productivities - There are significant variations in the instructional and related productivities of faculty resources among the various institutions and between levels (see Table 2). In lower level instruction there is a range of 130 credit hours per quarter from the lowest average productivity to the highest achieved among the institutions. The range in average productivities widens to 168 credit hours at the upper level and then narrows at the beginning and advanced graduate levels. The width of the range in Academic Counseling is even more striking, where it amounts to 208 FTE students. The lowest productivities in this task are, in part, explainable in terms of special programs or emphases. For example, the

TABLE I
SELECTED CHARACTERISTICS OF THE INSTITUTIONS OF THE
STATE UNIVERSITY SYSTEM OF FLORIDA,
1974-75 ACADEMIC YEAR

INSTITUTION	Full-time Equivalent Students (Three-Quarter Average)	Full-time Equivalent Faculty (Three-Quarter Average)	Number of Levels of Instruction	Number of Disciplines Reported
University of Florida	23,052	1,563	4	18
Florida State University	18,141	1,318	4	19
Florida Agricultural & Mechanical University	4,352	277	3	18
University of South Florida	16,039	973	4	15
Florida Atlantic University	4,620	364	2	14
University of West Florida	3,886	264	2	15
Florida Technological University	6,462	361	3	15
Florida International University	6,931	410	2	15
University of North Florida	2,696	169	2	9
State University System	86,179	5,699	4	23

Source: Calculated from the Student Data Course Files and the Academic Assignment Files of the State University System of Florida for Educational and General budgetary units only. Does not include special budgetary units such as the Institute of Food and Agricultural Sciences and the J. Hillis Miller Health Center at the University of Florida and the University of South Florida Medical Center or contract and grant budgets of the various institutions.

TABLE 2
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC
COUNSELING IN THE STATE UNIVERSITY SYSTEM OF FLORIDA BY
INSTITUTION, 1974-75 ACADEMIC YEAR

INSTITUTION	Instruction				Academic Counseling
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	
University of Florida	436	332	193	101	320
Florida State University	418	379	170	116	252
Florida Agricultural & Mechanical University	397	248	174	—	396
University of South Florida	527	397	114	176	297
Florida Atlantic University	—	291	143	—	271
University of West Florida	—	319	113	—	243
Florida Technological University	485	389	132	—	249
Florida International University	—	416	195	—	188
University of North Florida	—	405	171	—	193
State University System	446	357	158	111	274

Source: Same as Table 1

external degree program of Florida International University and the academic and career advising program at the University of North Florida both lead to a concentration of faculty effort in the Academic Counseling task. Furthermore, the workload associated with the various productivities in this task is less variable than might be inferred from the data. The headcount to FTE student ratios are considerably larger for the urban universities, and thus the number of students counseled would be higher than would be expected from the productivity presented in Table 2.

Instructional Productivities in the HEGIS Disciplines - When average productivities are determined by discipline and level, significant variations between disciplines for any given level are apparent (see Table 3). Most of the extremes can be explained in terms of the arithmetic of dividing small numbers of student credit hours by fractional FTE faculty positions (e.g., Technology at the lower level), the employment of large lecture classes (e.g., Psychology at the lower and upper levels), or the substitution of computer hardware and software for faculty resources (e.g., Computer and Information Sciences at the lower level). For most of the disciplines, average productivity declines with the level of instruction proceeding from the lower to the advanced graduate levels. Business and Management, Computer and Information Science, Psychology, and Public Affairs and Services all have average productivities which are above the all-discipline productivity at most levels and categories (Instruction and Academic Counseling). On the other hand, productivities in Engineering, Foreign Languages, Health Professions, Home Economics, and Physical Science are mostly below the all-discipline productivities in both

TABLE 3
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC
COUNSELING IN THE STATE UNIVERSITY SYSTEM OF FLORIDA,
BY DISCIPLINE, 1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling
	Lower Level Student Credit Hours per FTE Faculty Pos.	Upper Level Student Credit Hours per FTE Faculty Pos.	Beginning Graduate Student* Credit Hours per FTE Faculty Pos.	Advanced Graduate Student Credit Hours per FTE Faculty Pos.	
Agriculture and Natural Resources	---	32	53	---	36
Architecture & Environmental Design	304	285	199	477	311
Area Studies	464	320	160	460	147
Biological Studies	615	310	88	88	281
Business and Management	546	485	183	102	307
Communications	460	347	126	45	254
Computer and Information Science	2,152	453	267	---	429
Education	313	393	157	147	270
Engineering	205	253	101	82	174
Fine and Applied Arts	220	230	128	136	322
Foreign Languages	335	190	78	72	405
Health Professions	283	206	94	97	199
Home Economics	403	304	134	92	181
Law	---	---	393	---	410
Letters	464	385	130	120	376
Library Science	282	255	236	806	125
Mathematics	549	352	102	83	622
Physical Science	446	240	109	90	410
Psychology	1,079	556	124	135	375
Public Affairs and Services	376	599	159	129	319
Social Science	587	373	133	92	292
Technology	8,000	353	43	---	255
Interdisciplinary Studies	78	86	---	---	27
Not Reported by Discipline	---	---	---	---	---

Source: Same as Table 1.

*No credit hours reported, but 30 FTE faculty positions were reported.

categories. Generally, high productivities in Academic Counseling tend to occur in disciplines in which instructional productivities are above average, although the homogeneity of the discipline classes and the extent to which curricula are structured appear to have some influence on productivity ratios in the counseling function.

Inferences drawn from interinstitutional comparisons of instructional productivities by discipline and level are complicated by the fact that not all of the disciplines and levels are found at all institutions. However, there are certain disciplines and levels which are found at most or all of the institutions. These disciplines and levels are: Biological Studies, Business and Management, Education, Fine and Applied Arts, Letters, Mathematics, Physical Science, Psychology, and Social Sciences at the upper and beginning graduate levels. When the instructional productivities achieved in these disciplines at the various institutions are ranked from the highest (1) to the lowest (9), it is evident that there is no strong, direct relationship between the size of the institution and average productivity (see Table 4). In the various combinations of disciplines and levels, both the University of Florida and Florida State University ranked either first or second in average productivity in six classes and either lowest or next to lowest in average productivity in two classes. On the other hand, Florida International University achieved the top, or next to the top, productivity in six classes and the lowest, or next to lowest, productivity in one class.

The differences in average instructional productivities per quarter between institutions for given disciplines and levels were substantial. Among the dis-

TABLE 4
RANK OF THE INSTITUTIONS IN THE STATE UNIVERSITY SYSTEM
OF FLORIDA IN INSTRUCTIONAL PRODUCTIVITY BY SPECIFIED DISCIPLINE
AND LEVEL, 1974-75

DISCIPLINE	INSTITUTION								
	UF	FSU	FAMU	USF	FAU	UWF	FTU	FIU	UNF
Biological Studies									
Upper Level	4	8	2	1	5	3	7	6	-
Beginning Graduate	1	4	-	5	3	6	2	-	-
Business and Management									
Upper Level	2	3	4	7	3	5	6	1	8
Beginning Graduate	6	4	-	8	3	7	5	1	2
Education									
Upper Level	8	3	7	5	6	9	2	4	1
Beginning Graduate	4	7	1	6	3	9	5	2	8
Fine and Applied Arts									
Upper Level	7	1	9	2	8	6	5	3	4
Beginning Graduate	3	1	-	4	5	-	6	2	-
Letters									
Upper Level	6	5	9	2	3	8	1	7	4
Beginning Graduate	4	2	9	6	5	7	3	8	1
Mathematics									
Upper Level	1	8	9	2	6	5	7	4	3
Beginning Graduate	2	3	5	6	7	4	8	1	-
Physical Science									
Upper Level	4	7	5	1	9	8	6	2	3
Beginning Graduate	3	1	-	4	5	2	-	-	-
Psychology									
Upper Level	2	1	8	5	9	7	6	3	4
Beginning Graduate	9	4	5	7	8	6	2	3	1
Social Sciences									
Upper Level	4	2	7	3	9	6	8	5	3
Beginning Graduate	2	5	9	3	7	4	6	1	8
All Disciplines									
Upper Level	6	5	9	3	8	7	5	1	2
Beginning Graduate	2	5	3	8	6	9	7	1	4

Source: Same as Table 1.

cipines mentioned above; the ranges in average productivities achieved by the institutions at the upper level (the difference between the high and low productivity) varied from 468 credit hours per FTE faculty position in Psychology to 118 credit hours per FTE faculty position in Mathematics (see Appendix 2, Tables 3-1 -- 3-9). At the beginning graduate level the greatest range in average productivities was in Letters and the narrowest range was in Biological Studies. The ranges in average productivities in each of the disciplines exceeded the range in overall institutional productivities at the same level in all but one of these disciplines at the upper level, and one discipline at the beginning graduate level.

Similar variations are also to be found for disciplines not as widely represented among the institutions of the State University System. For example, three institutions with lower divisions have a major commitment to engineering education. Average instructional productivities in Engineering at the lower level range from 540 student credit hours per FTE faculty position at Florida Technological University to 204 credit hours per FTE faculty position at the University of Florida. At the upper level the average productivities per FTE faculty position utilized in engineering instruction amounted to 385 credit hours at Florida Technological University, 318 credit hours at the University of South Florida, and 226 credit hours at the University of Florida (see Appendix 2, Tables 3-1, 3-4, and 3-7).

Alternative Calculation of Upper Level and Beginning Graduate Instructional Productivities - The procedures employed in the State University System in 1973-74 and 1974-75 for reporting credit hours by level represented a dis-

tinct break from those utilized previously and the procedure subsequently adopted. During this period the student's classification was used as the primary basis for determining the level at which credit hours were reported and funded. For example, all registrations in graduate courses by students not formally admitted to beginning or advanced graduate programs were reported at the upper level, and all undergraduate registrations by formally admitted graduate students were reported at the level of the course. Earlier procedures, and the method subsequently adopted, primarily employ the level of the course as the basis for reporting credit hours.

In order to provide for added comparability of the data over time and to better relate instructional productivities to class sizes in a later section of this report, the instructional productivities were recalculated using the level of the course as the basis for allocating credit hours between instructional levels. In this adjustment, lower level credit hours were not significantly affected, and advanced graduate credit hours were unaffected because student classification was retained for this category to provide consistency with earlier procedures.⁸

In 1975-76, level of the course became the criterion for reporting credit hours, with the further modification of eliminating the beginning and advanced graduate classifications and substituting graduate instruction, master's thesis, and doctoral dissertation as the categories of credit hours.

⁸

Throughout all periods FTE faculty instructional effort is reported by level of course with apportionment of the FTE effort between beginning and advanced graduate levels where students with both classifications are enrolled in the same course.

The net effect of the change in the method of calculating productivities was to reduce the productivities at the upper level and increase those at the beginning graduate level (see Table 5). The changes were particularly pronounced for the urban universities where significant enrollments in graduate classes occur for students seeking teacher certification or professional improvement. At the University of South Florida, Florida Technological University, Florida International University, and the University of North Florida, the percent increases in beginning graduate productivities approached or exceeded 100 percent. A similar change was noted for Florida A and M University which has retained a significant graduate teacher education operation in Duval County.

Among the major discipline categories, the most significant shifts in productivities were in Business and Management and Education (see Table 6). Large increases in beginning graduate productivities were also observed in Computer and Information Sciences and Health Professions. In general, the smallest shifts in productivities were for the laboratory sciences, the Fine and Applied Arts, and Foreign Languages -- all disciplines which have substantial course or performance prerequisites for admission to the courses.

Among the institutions the largest shifts in productivities were in Business and Management and Education at the urban institutions (see Appendix 2, Tables 6-1 -- 6-9). There were also significant shifts at these same institutions in Letters, Psychology, and Social Science, no doubt reflecting the importance of these disciplines in support of both Business and Management and Education master's programs.

TABLE 5
 ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
 EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
 IN THE STATE UNIVERSITY SYSTEM OF FLORIDA
 BY INSTITUTION, 1974-75 ACADEMIC YEAR*

INSTITUTION	INSTRUCTION			
	Lower Level Student Credit Hours per FTE Faculty Pos.	Upper Level Student Credit Hours per FTE Faculty Pos.	Beginning Graduates Student Credit Hours per FTE Faculty Pos.	Advanced Graduates Student Credit Hours per FTE Faculty Pos.
University of Florida	436	321	222	101
Florida State University	418	361	210	116
Florida Agricultural & Mechanical University	297	220	308	---
University of South Florida	527	363	201	176
Florida Atlantic University	---	280	288	---
University of West Florida	---	297	182	---
Florida Technological University	485	362	243	---
Florida International University	---	404	408	---
University of North Florida	---	356	316	---
State University System	446	337	233	111

*Note: Calculations for this table employ definitions which differ from those utilized in Table 1. All enrollments in Graduate Courses are counted at the Graduate Level.

Source: Same as Table 1.

TABLE 6
ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
IN THE STATE UNIVERSITY SYSTEM OF FLORIDA, BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR*

DISCIPLINE	Instruction			
	Lower Level	Upper Level	Beginning Graduates	Advanced Graduates
	Student Credit Hours per FTE Faculty Pos.			
Agriculture and Natural Resources	---	9	1,527	---
Architecture & Environmental Design	304	279	234	477
Area Studies	464	335	87	460
Biological Studies	615	289	147	88
Business and Management	546	464	256	102
Communications	460	346	166	45
Computer and Information Science	2,152	508	508	---
Education	313	330	288	147
Engineering	205	272	137	82
Fine and Applied Arts	220	224	174	136
Foreign Languages	335	187	106	72
Health Professions	283	190	331	97
Home Economics	403	296	209	92
Law	---	---	394	---
Letters	464	375	187	120
Library Science	282	197	278	306
Mathematics	549	337	130	83
Physical Science	446	235	131	90
Psychology	1,079	532	181	135
Public Affairs and Services	376	589	271	129
Social Science	587	360	189	92
Technology	8,000	298	13	---
Interdisciplinary Studies	18	44	---	---
Not Reported by Discipline	---	---	---	---

*See footnote to Table 5.
 Source: Same as Table 1.

Changes in Instructional Productivity from 1973-74 to 1974-75 - The

data on which comparisons of instructional productivity can be made over time are limited. In 1973-74 the Academic Assignment Files were available for only six of the nine institutions in the System for the entire academic year. Furthermore, there were student classification problems in the graduate component of the Student Data Course Files which affect the productivities among the Beginning and Advanced Graduate classifications for those institutions with doctoral programs. Of the four institutions with lower divisions reporting for the 1973-74 and 1974-75 academic years, all experienced increased lower level productivity from 1973-74 to 1974-75 with the greatest absolute and percentage change occurring at Florida A and M University (see Table 2 and Table 7). At the upper level, five of the six institutions on which data were available experienced increases in productivity from 1973-74 to 1974-75 with the greatest absolute and percentage increase occurring at the University of North Florida. In the Academic Counseling task, four of the six institutions had slight increases in productivity and two institutions had slight decreases in productivity in this task.

The greatest percentage and absolute increases in upper level instructional productivity occurred in Business and Management where productivities increased for five of the six institutions (see Appendix 2, Tables 7-1 -- 7-6). Significant increases were also recorded for Mathematics. Among the other major disciplines decreases in upper level instructional productivity were observed in Education, Fine and Applied Arts, and Letters for two-thirds of the institutions. The University of Florida recorded productivity increases at the

TABLE 7
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITIONS COMMITTED TO INSTRUCTION AND ACADEMIC
COUNSELING IN THE STATE UNIVERSITY SYSTEM OF FLORIDA BY LEVEL AND
INSTITUTION, 1973-74 ACADEMIC YEAR

INSTITUTION	Instruction				Academic Counseling
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	
University of Florida	373	319	---	---	339
Florida State University	---	---	---	---	---
Florida Agricultural and Mechanical University	256	234	354	---	493
University of South Florida	514	416	---	---	261
Florida Atlantic University	---	---	---	---	---
University of West Florida	---	298	127	---	229
Florida Technological University	444	374	107	---	261
Florida International University	---	---	---	---	---
University of North Florida	---	362	170	---	187
State University System	---	---	---	---	---

Source: Same as Table 1.

upper level for seven of the nine disciplines, while the University of West Florida, Florida Technological University, and the University of North Florida experienced increases in productivity in six of the nine disciplines. Productivity declined at the upper level for all nine disciplines at Florida A and M University.

Changes in Instructional Productivity from 1972-73 to 1974-75 - Another measurement of the changes in instructional productivity can be derived by utilizing the productivities employed in the 1972-73 allocation of faculty resources and comparing them with the adjusted productivities realized in 1974-75. Between these two academic years, average instructional productivities increased 9.58 percent at the lower level, 15.01 percent at the upper level, 2.19 percent at the beginning graduate level, and 21.97 percent at the advanced graduate level (see Table 8). However, the changes were not uniform among the institutions. At the lower level, the University of South Florida and Florida Technological University experienced the largest percentage and absolute increases in instructional production. Changes in productivities at the upper level were mixed among the institutions with Florida A and M University, Florida Atlantic University, and the University of West Florida realizing reductions in average productivity and the balance of the institutions experiencing significant percentage and absolute increases. At the beginning graduate level, productivities increased at Florida A and M University, Florida Atlantic University, Florida Technological University, Florida International University, and the University of North Florida, while average productivity declined at the other institutions at this level. All institutions with doctoral

TABLE 8
CHANGES IN AVERAGE INSTRUCTIONAL PRODUCTIVITIES PER QUARTER IN THE
STATE UNIVERSITY SYSTEM OF FLORIDA BY INSTITUTION
AND BY LEVEL, 1972-73 - 1974-75

INSTITUTION	Average Instructional Productivity and Percent Change in Average Productivity at the:										
	Lower Level		Upper Level		Beginning Graduate		Advanced Graduate		Percent Change (Percent)	Percent Change (Percent)	
	1972-73	1974-75*	Percent Change (Percent)	1972-73	1974-75*	Percent Change (Percent)	1972-73	1974-75*	Percent Change (Percent)	1972-73	1974-75*
University of Florida	412	436	+ 5.80	287	321	+ 11.84	235	222	- 5.54	91	+ 10.98
Florida State University	397	418	+ 5.28	293	361	+ 23.20	219	210	- 4.11	92	+ 11.6
Florida A & M University	389	397	+ 2.05	268	220	- 17.92	276	308	+ 11.16	—	—
University of South Florida	424	527	+ 24.29	298	363	+ 21.81	219	201	- 8.82	87	176
Florida Atlantic University	—	—	—	—	292	—	280	—	—	—	—
University of West Florida	—	—	—	—	309	297	—	386	226	182	- 19.47
Florida Technological University	403	485	+ 20.34	294	362	+ 23.12	225	243	+ 8.00	—	—
Florida International University	—	—	—	—	299	404	+ 35.11	265	408	+ 53.40	—
University of North Florida	—	—	—	—	308	356	+ 15.58	270	316	+ 17.03	—
State University System	407	446	+ 9.58	293	337	+ 15.01	228	233	+ 2.19	91	111
											+ 21.97

*To achieve comparability of data between the years, the adjusted productivity data were employed for 1974-75.

Source: 1972-73 Allocation Document of the Board of Regents, Tallahassee: 7 July, 1972 and Table 5.

programs realized significant increases in productivity at the advanced graduate level between 1972-73 and 1974-75.

When the changes among the disciplines are examined, it is apparent that there were significant shifts in productivity (see Table 9).⁹ At the lower level, productivities in Education, Engineering, Fine and Applied Arts, Foreign Languages, and Library Science declined, while average productivities in the other disciplines rose significantly. At the upper level, productivities declined only in Communications, Foreign Languages, and Library Science. The greatest percentage and absolute increases in instructional productivities occurred in Business and Management and Psychology at the upper level. There were substantial (over 20 percent) decreases in average productivities at the beginning graduate level in Area Studies, Biological Studies, Communications, Foreign Languages, Mathematics, and Psychology, and significant increases in productivity in Fine and Applied Arts, and Law. At the advanced graduate level, productivities declined in over one-half of the discipline categories.

Long-term Changes in Instructional Productivity - Assessment of long-term trends in instructional productivity in the System is difficult because of gaps in the data for the whole System and because of definitional changes. However, by piecing together data elements, it is possible to identify the nature of the changes, if not detail in the absolute magnitudes:

(1) Changes in Instructional Productivity 1966-67 - 1974-75. Although

⁹ The discipline productivities employed in 1972-73 were based on those realized at the University of Florida in 1971-72 because the other institutions had not developed a faculty activity system at that point.

TABLE 9
CHANGES IN AVERAGE INSTRUCTIONAL PRODUCTIVITY
PER QUARTER IN THE STATE UNIVERSITY SYSTEM OF FLORIDA BY
SPECIFIED HEGIS DISCIPLINE
1972-73 - 1974-75*

DISCIPLINE	Lower Level		Upper Level		Beginning Graduate		Advanced Graduate		
	Average Instructional Productivity in 1972-73*	Percent Change in Instructional Productivity in 1974-75 (Percent)	Average Instructional Productivity in 1972-73*	Percent Change in Instructional Productivity in 1974-75 (Percent)	Average Instructional Productivity in 1972-73*	Percent Change in Instructional Productivity in 1974-75 (Percent)	Average Instructional Productivity in 1972-73*	Percent Change in Instructional Productivity in 1974-75 (Percent)	
Architecture and Environmental Design	271	304	+ 12.17	233	279	+ 19.74	236	234	- 0.85
Area Studies	464	464	-----	299	335	+ 12.04	129	82	- 32.56
Biological Studies	615	615	+ 34.27	232	289	+ 24.56	200	147	- 26.50
Business and Management	486	546	+ 12.34	347	484	+ 33.71	286	253	- 4.89
Communications	362	460	+ 27.02	344	346	- 0.42	315	166	- 47.31
Computer and Information Sciences	422	2,152	+409.95	435	508	+ 16.78	148	-----	-----
Education	373	313	- 17.10	324	330	+ 1.85	276	288	+ 4.34
Engineering	223	205	- 8.08	187	272	+ 45.45	138	137	- 0.73
Fine and Applied Arts	257	220	- 14.40	209	234	+ 7.07	126	174	+ 38.09
Foreign Languages	346	335	- 3.18	193	187	- 3.11	193	106	- 45.08
Health Professions	153	283	+ 84.96	157	190	+ 21.61	126	-----	-----
Home Economics	325	403	+ 24.00	263	296	+ 12.54	207	209	+ 0.96
Law	-----	-----	-----	-----	-----	-----	319	364	+ 23.51
Literature	416	464	+ 11.53	309	375	+ 21.35	222	187	- 15.77
Library Science	406	282	- 30.38	246	197	- 19.92	242	278	+ 14.87
Mathematics	432	849	+ 27.08	305	337	+ 10.84	184	130	- 20.74
Physical Science	362	446	+ 23.20	177	235	+ 32.76	116	131	+ 12.93
Psychology	578	1,079	+ 86.67	492	532	+ 32.33	242	181	- 25.21
Social Science	538	587	+ 9.10	358	360	+ 0.55	229	199	- 17.47
All Disciplines	407	446	+ 9.58	294	337	+ 14.82	228	233	+ 2.19

*To achieve comparability of data between the years, the adjusted productivity data were employed for 1974-75.
Source: 1972-73 Allocation Document of the Board of Regents, Tallahassee: 7 July 1972 and Table 6.

there are year-to-year variations among the institutions, the trend in lower level instructional productivities is definitely upward from 1966-67 through 1974-75 (see Table 8). At the upper level, instructional productivities tended to fall through 1969-70 and then increase through 1974-75 (see Table 10). Part of the actual increases in productivity at the upper level and reduction in productivity at the beginning graduate level between 1972-73 and 1974-75 are attributable to the change in the way students were counted and funded.¹⁰ The basis for claiming long-term productivity increases is further supported by the fact that productivities in the earlier years were measured on student credit hours only for the fall quarter, while the later years in the tables represent averages established by employing a three-quarter average of student credit hours.¹¹

(2) Changes in Instructional Productivity, 1953-54 — 1974-75. In the middle 1950's an extensive study of the needs of the State of Florida for higher education was undertaken. This study provided data which can be used to estimate instructional productivities in 1953-54.¹² Based on a comparison of the derived productivity for that year and

¹⁰

For a discussion of this page see page 26.

¹¹

Resources for 1974-75 and 1975-76 were allocated in the State University System on a four-quarter average basis.

¹²

See A. J. Brumbaugh and Myron R. Blee, Higher Education and Florida's Future, Gainesville: University of Florida Press, Vol. I, p. 20.

TABLE 10
LOWER LEVEL INSTRUCTIONAL PRODUCTIVITIES PER QUARTER REALIZED
IN THE STATE UNIVERSITY SYSTEM OF FLORIDA AND THE INDIVIDUAL
INSTITUTIONS 1966-67-1974-75

INSTITUTION	Student Credit Hours per FTE Instructional Position						1974-75
	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72*	
University of Florida	360	364	400	382	388	420	373
Florida State University	344	372	357	391	367	377	397
Florida Agricultural and Mechanical University	296	381	381	330	350	364	389
University of South Florida	383	379	426	400	420	443	424
Florida Atlantic University	—	—	—	—	—	—	—
University of West Florida	—	—	—	—	—	—	—
Florida Technological University	—	—	393	400	392	400	444
Florida International University	—	—	—	—	—	—	—
University of North Florida	—	—	—	—	—	—	—
State University System	—	—	—	—	—	407*	407*
							410

*Budgeted productivities. Actual productivities not available.

TABLE 10 (Cont.)
 UPPER LEVEL INSTRUCTIONAL PRODUCTIVITIES PER QUARTER REALIZED
 IN THE STATE UNIVERSITY SYSTEM OF FLORIDA AND THE INDIVIDUAL
 INSTITUTIONS, 1966-67-1974-75

INSTITUTION	Student Credit Hours per FTE Instructional Position						1973-74	1974-75
	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72		
University of Florida	271	294	258	250	265	279	287	319
Florida State University	309	269	251	242	247	275	293	290*
Florida Agricultural and Mechanical University	270	252	226	220	240	267	268	234
University of South Florida	314	307	290	269	355	301	298	416
Florida Atlantic University	332	348	281	275	275	295	292	286*
University of West Florida	—	254	232	260	287	300	309	298
Florida Technological University	—	—	146	250	275	275	294	374
Florida International University	—	—	—	—	—	—	299	389
University of North Florida	—	—	—	—	—	—	308	405
State University System	—	—	—	—	—	—	293*	290*
								357

*Budgeted productivities. Actual productivities not available.

TABLE 10 (Cont.)
**GRADUATE LEVEL INSTRUCTIONAL PRODUCTIVITIES-PER QUARTER REALIZED
 IN THE STATE UNIVERSITY SYSTEM OF FLORIDA AND THE INDIVIDUAL
 INSTITUTIONS 1966-67-1974-75**

INSTITUTIONS	Student Credit Hours per FTE Instructional Position						
	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73
University of Florida	140	141	120	133	147	147*	A.G. 1 91* B.G. 2 235*
Florida State University	149	163	124	130	143	137*	A.G. 1 92* B.G. 2 219*
Florida Agricultural and Mechanical University	174	171	186	200	220	217*	A.G. 1 --- B.G. 2 276*
University of South Florida	207	206	232	210	204	195*	A.G. 1 87* B.G. 2 219*
Florida Atlantic University	213	329	171	220	220	217*	A.G. 1 --- B.G. 2 231*
University of West Florida	---	---	---	236	220	195*	A.G. 1 --- B.G. 2 226*
Florida Technological University	---	---	---	220	208	252*	A.G. 2 --- B.G. 2 225*
Florida International University	---	---	---	---	---	---	A.G. 2 --- B.G. 2 265*
University of North Florida	---	---	---	---	---	---	A.G. 2 --- B.G. 2 270*
State University System	---	---	---	---	---	---	A.G. 1 91* B.G. 2 228*

*Budgeted Productivities. Actual productivities not available.

1. A.G.: Advanced Graduate. 2. B.G.: Beginning Graduate.

Source: FACT BOOK, STATE UNIVERSITY SYSTEM OF FLORIDA, Tallahassee: Florida Board of Regents, 1973, State University System Budget Allocation Document, 1973-74, and same as Table 1.

1974-75, it is evident that substantial increases in productivity have taken place at the undergraduate levels (see Table 11). While comparability of the 1953-54 data on the graduate levels cannot be achieved because of the subsequent classification of graduate students into the beginning and advanced levels, it is obvious that graduate productivities have increased even more in percentage terms. For example, the derived realized productivities at the graduate level in 1953-54 amounted to 88.8, 76.8, and 90.0 credit hours per FTE teaching position for all graduate students at the University of Florida, Florida State University, and Florida A and M University.¹³ These productivities are well below those realized in 1974-75 for doctoral students, and are less than half of those productivities achieved at the beginning graduate level in 1974-75 (again see Table 5).

(3) An Alternative Approach to Measuring Productivity Changes. The long-term increase in instructional productivities can be illustrated further by comparing the faculty resources made available to the newer institutions at different points in time. For example, in 1969-70 the University of West Florida (then three years old) was allocated 227 faculty positions for 2,573 full-time equivalent students in the fall quarter.¹⁴ In 1974-75 the University of North Florida (then

¹³

Ibid.

¹⁴

Source: Operating Budget of the University of West Florida, 1969-70.

TABLE 11
 CHANGE IN AVERAGE INSTRUCTIONAL PRODUCTIVITY PER QUARTER
 IN THE STATE UNIVERSITY SYSTEM OF FLORIDA,
 BY SPECIFIED INSTITUTION AND LEVEL,
 1953-54 - 1974-75

INSTITUTION AND LEVEL	Derived Average Instructional Productivity, 1953-54*	Adjusted Average Instructional Productivity, 1974-75**	Percent Change in Average Instructional Productivity (Percent)
UNIVERSITY OF FLORIDA			
Lower Level	321	436	+ 35.83
Upper Level	182	321	+ 76.37
FLORIDA STATE UNIVERSITY			
Lower Level	231	418	+ 80.95
Upper Level	167	361	+ 116.17
FLORIDA A AND M UNIVERSITY			
Lower Level	198	397	+ 100.51
Upper Level	141	220	+ 56.05

* Average productivities were derived by multiplying FTE undergraduate students by 15 to obtain student credit hours per FTE teaching position.

** Adjusted average productivities were used to achieve comparability.

Source: A.J. Brumbaugh and Myron R. Blee, Higher Education and Florida's Future, Gainesville: University of Florida Press, Vol. 1, 1956, p. 20, and Table 5.

three years old), with approximately the same discipline mix, was provided with 167 faculty positions for a fall enrollment of 2,687 FTE students, even though the enrollments of the University of North Florida were comprised of more than twice as many graduate students as the University of West Florida had in 1969-70.¹⁵ This represents a change in the student-faculty ratio from 11.33 to 16.09, or an increase in 42 percent. The University of North Florida also received commensurately fewer academic support positions.

The System averages at all levels have been increased over time by the establishment of new institutions where overall productivities (actual and budgeted) tend to be higher than for the older institutions. For example, the average productivity in 1974-75 at the upper level would be reduced from 357 to 348 credit hours per FTE faculty position if the credit hours generated and faculty resources utilized at this level of Florida International University and the University of North Florida were excluded.

HEGIS Disciplines as the Basis for Measuring Instructional Productivity

or Allocating Resources - The appropriateness of the HEGIS discipline categories for measuring the instructional productivity of faculty resources, allocating resources, or measuring cost may be questioned in view of the substantial absolute variations previously indicated. In order to further explore the validity of the HEGIS discipline for these purposes three approaches were utilized: (1) coefficients of variation were calculated for the average productivities by

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Source: Operating Budget of the University of North Florida, 1974-75.

level and discipline for the HEGIS disciplines; (2) a graphic analysis of the ranges of productivities was developed for the nine major disciplines previously identified,¹⁶ and (3) a decision rule to test the hypothesis that there were no significant differences in the average productivities by level was established.

When the coefficients of variation are compared, it is evident that the relative variations in instructional productivities among institutions for given levels and disciplines are greater than those across discipline categories for the same levels (see Table 12). On the other hand, the relative variations among the institutions across disciplines by level are considerably smaller.

The second approach to the analysis of the variation in instructional productivities was to plot the ranges of productivities for the major disciplines common to all institutions. The graph of the dispersion of upper level average productivities reveals considerable overlap among the various disciplines (see Chart 1). To illustrate the extent of overlap, four institutional average productivities achieved in the Social Sciences were above the average productivities realized at three of the institutions in Psychology, and two institutions achieved average productivities in Biological Sciences which exceeded those realized in Business and Management at five institutions. Even in Physical Sciences and Fine and Applied Arts where the ranges appear to be somewhat separated, there is overlap with the other disciplines. The graph of lower level productivities shows a greater relative variation in productivities among the institutions than exists at the upper level (see Chart 2). The overlap among the disciplines is also less and, in the case of Psychology, is al-

¹⁶

The coefficient of variation is the standard deviation expressed as a percent of the mean and measures relative variation.

TABLE 12
COEFFICIENTS OF VARIATION IN AVERAGE PRODUCTIVITY
AMONG THE INSTITUTIONS OF THE STATE UNIVERSITY SYSTEM
BY DISCIPLINE AND LEVEL 1974-75*

DISCIPLINE	Coefficient of Variation at the:			
	Lower Level (Percent)	Upper Level (Percent)	Beginning Graduate (Percent)	Advanced Graduate (Percent)
Agriculture and Natural Resources	---	---	---	---
Architecture and Environmental Design	114.84	126.08	155.29	---
Area Studies	---	210.65	47.32	299.18
Biological Studies	42.80	49.60	27.52	24.84
Business and Management	40.82	20.11	27.81	56.34
Communications	117.82	46.13	55.09	84.76
Computer and Information Science	---	186.14	80.71	---
Education	51.89	19.36	34.57	133.29
Engineering	45.81	26.94	37.54	46.90
Fine and Applied Arts	35.28	32.62	81.76	47.76
Foreign Languages	25.54	78.65	47.41	22.24
Health Professions	---	29.08	48.59	---
Home Economics	11.00	16.20	41.82	---
Law	---	---	16.19	---
Letters	29.65	31.95	38.06	29.10
Library Science	---	44.95	25.65	---
Mathematics	23.84	38.00	48.46	148.53
Physical Science	21.90	33.24	38.61	20.86
Psychology	44.72	31.27	253.00	32.11
Public Affairs and Services	---	280.38	91.19	---
Social Science	18.63	22.93	74.94	584.57
Technology	---	857.38	---	---
Interdisciplinary Studies	---	2,883.94	---	---
All Disciplines	27.55	25.64	28.76	39.34

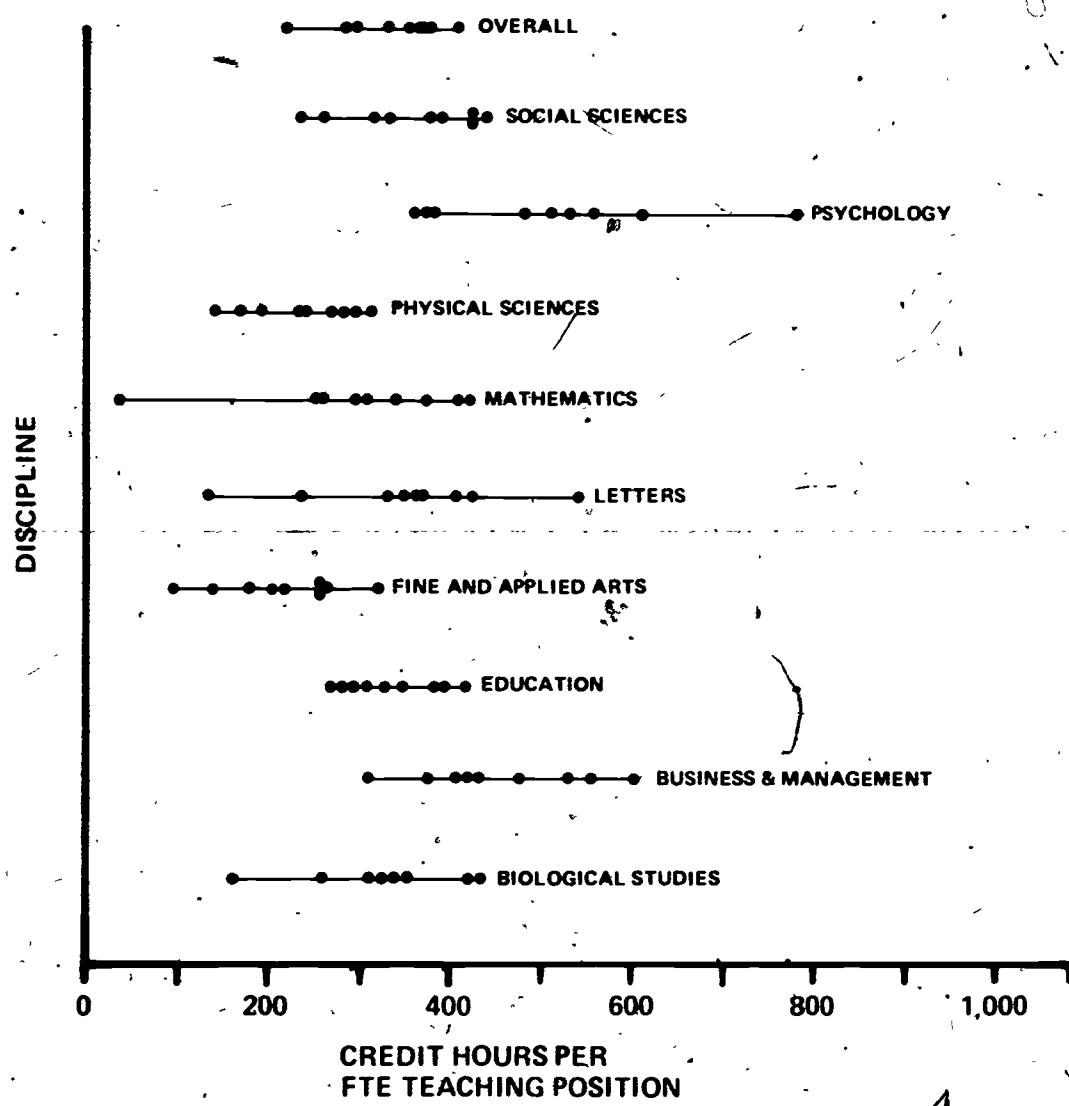
- The coefficient of variation is determined:

C.V. = $\frac{\sigma}{\bar{X}}$ where: σ = the standard deviation of the individual institution's mean productivities from the SUS mean.

\bar{X} = the SUS mean productivity.

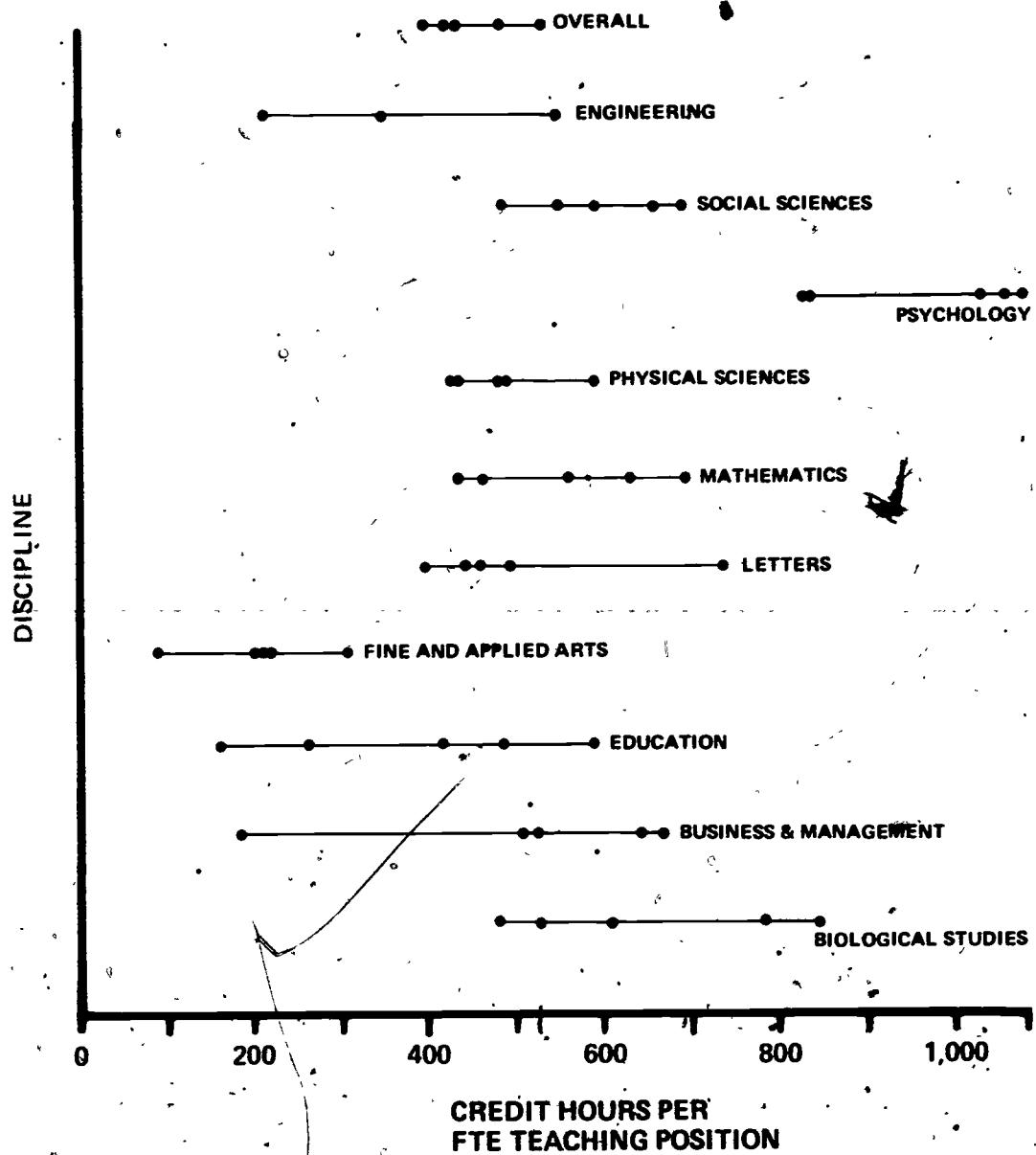
Source: Same as Table 1.

CHART 1
 RANGE OF ADJUSTED AVERAGE INSTRUCTIONAL PRODUCTIVITIES
 PER QUARTER FOR THE INSTITUTIONS OF THE STATE UNIVERSITY SYSTEM
 OF FLORIDA AT THE UPPER LEVEL BY SPECIFIED DISCIPLINE,
 1974-75 ACADEMIC YEAR



Source: Appendix 2, Tables 3-1-3-9.

CHART 2
 RANGE OF ADJUSTED AVERAGE INSTRUCTIONAL PRODUCTIVITIES
 PER QUARTER FOR THE INSTITUTIONS OF THE STATE UNIVERSITY SYSTEM
 OF FLORIDA AT THE LOWER LEVEL BY SPECIFIED DISCIPLINE,
 1974-75 ACADEMIC YEAR



Source: Same as Chart 1.

most nonexistent.

The third and final method used to evaluate the question as to whether there are real differences in productivities among these disciplines involved establishment of a statistical decision rule. Basically, the decision rule involved the following elements and procedures: (1) the System upper level mean productivities and standard deviations in the major disciplines were employed as though they represented those derived from random samples; (2) the median average productivity among the disciplines (Social Science) was used as the mean against which the average productivities of the other disciplines were tested; (3) the level by significance of 0.05 was chosen; and (4) the differences between the Social Science average productivity and the average productivities of the other disciplines were evaluated in terms of standard statistical procedures (*t* tests).¹⁷ Following this procedure only the average productivities of Fine and Applied Arts, Physical Sciences, and Psychology were found to be significantly different from the average productivity realized in Social Science. The average productivity in Psychology would not have been significantly different from that in Social Sciences if the extremely high productivity realized at one institution had been removed from the calculation of the System average productivity in Psychology.

Test of Linearity and the Relationship Between Student Credit Hours and Full-Time Equivalent Faculty Instructional Positions - From a conceptual stand-

¹⁷ The exact procedures employed are described in George W. Snedecor and William G. Cochran, Statistical Methods, 6th ed., Ames: Iowa State University Press, 1967, pp. 115 and 116.

point it might be expected that the relationship between faculty inputs and outputs of student credit hours would be linear if class sizes are fixed and inflexible by design or custom. Furthermore, most analyses of faculty productivity and almost all funding formulas assume that the "production function" for instruction is linear, and thus that average productivity is not a function of the number of enrollments or of the level of staffing. 18

In order to test for linearity, the nine disciplines and two levels which are found at most or all of the nine institutions were selected for further study. The basic approach was to employ regression analysis of the relationship between student credit hours and full-time equivalent faculty instructional positions by discipline and level. Each of the three quarters of the 1974-75 academic year was utilized as an observation or replication, and linear, quadratic, and cubic lines were sequentially fit by discipline and by level. Although the data do not meet the randomness requirements for statistical tests of significance, a decision rule was adopted which rejected the equation of the regression line at which the F computed for the reduction in the sum of squares was not significant at the 0.05 level of significance.

With this approach, the relationship between student credit hours and full-time equivalent faculty positions was curvilinear for four of the nine disciplines at the upper level, and four of the nine disciplines at the beginning graduate level (see Table 13). In the case of Fine/Applied Arts and the Social

18

For an example of the explicit assumption that the relationship is linear, see David Breneman, The Stability of Faculty Input Coefficients in Linear Workload Models of the University of California, Berkeley: Ford Foundation Program for Research in University Administration, April, 1969.

TABLE 12
MEASURES OF THE ASSOCIATION BETWEEN STUDENT CREDIT HOURS
AND FULL-TIME EQUIVALENT FACULTY POSITIONS COMMITTED TO INSTRUCTION
BY SPECIFIED DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE AND LEVEL		R ²	REGRESSION COEFFICIENTS			
			a	b	c	d
Biological Sciences	Upper Level	0.8287	308.6177	37.9992	54.4671	— 2.0467
	Beginning Graduate	0.8758	10.8957	84.3369	**	**
Business and Management	Upper Level	0.9299	12.370.5254	1,251.1640	63.1899	— 0.6373
	Beginning Graduate	0.7421	49.7384	176.8765	**	**
Education	Upper Level	0.8937	1,841.4218	353.6539	**	**
	Beginning Graduate	0.8696	553.2293	134.4652	**	**
Fine and Applied Arts	Upper Level	0.8700	3,828.6006	— 281.4950	12.7112	**
	Beginning Graduate	0.9591	417.9819	— 105.8845	33.8894	— 1.0504
Letters	Upper Level	0.9533	— 498.7628	413.2927	**	**
	Beginning Graduate	0.8771	1.1216	129.8631	**	**
Mathematics	Upper Level	0.9509	— 1,237.5346	444.2780	**	**
	Beginning Graduate	0.9263	19.3102	— 35.6418	41.1839	— 2.5350
Physical Sciences	Upper Level	0.6008	469.2980	203.8523	**	**
	Beginning Graduate	0.8850	— 2.0735	40.6456	8.7201	**
Psychology	Upper Level	0.5039	28.4246	552.9524	**	**
	Beginning Graduate	0.8380	— 40.2700	236.8536	— 16.9197	**
Social Sciences	Upper Level	0.8922	5.107.6531	430.8489	— 8.3177	0.1679
	Beginning Graduate	0.9465	1.107.3557	1.13082	20.0858	— 0.6605

*The functions fitted to the data were: $Y_{sch} = a + bX$; $Y_{sch} = a + bX + cX^2$, and $Y_{sch} = a + bX + cX^2 + dX^3$ where Y_{sch} = student-credit hours and X = FTE faculty.

**Reduction in sums of squares was not statistically significant (0.05 level)

Source: Same as Table 1.

Science, the relationship was curvilinear at both levels. The squared correlation coefficients obtained in the computation process indicated that a high percentage of the variation in student credit hours was "explained" by the regression analysis in all disciplines and levels, except in the cases of Psychology at the upper level, Physical Science at the upper level, and Business and Management at the beginning graduate level.¹⁹

V

CLASS SIZES

Class Sizes and Instructional Productivity - Any extensive analysis or discussion of faculty productivity will, at some point, turn to size of classes as a significant factor. Unfortunately, little detailed information is usually presented in describing class size distributions, or in relating class sizes to cost or to instructional productivity. This study attempts to overcome the usual deficiencies by providing: (1) distributions of class sizes by discipline and level which employ relatively narrow class intervals; and (2) appropriate measures of central tendency and dispersion to assist in the interpretation of the data.

Class Sizes - Preliminary analysis of the data revealed that a major adjustment was necessary so as to provide a meaningful description of class sizes. The initial distribution of class sizes included all courses, which, while related

¹⁹

It might be of interest to note that at one time the author engaged in extensive analyses of production functions in resource utilization studies, and the cubic regression lines obtained in the cases specified above come as close to the "classical" production function as the author has observed.

to student credit hour production, was not descriptive of what was taking place within the classrooms and laboratories. This initial distribution showed relatively high percentages of classes with enrollments of less than 10 students, and the mean and median class sizes were distorted by those courses which were not conducted in a classroom or laboratory format (see Table 14). It was decided to exclude those courses which: (1) are conducted on a one-on-one basis; (2) depend essentially on student initiative in the learning process; and (3) are primarily experience based.²⁰

When these courses were excluded, there were marked changes in the distribution of class sizes and the measures of central tendency and dispersion (see Table 15). The mean class sizes were increased to 33.85, 24.84, and 14.77 students per class at the lower, upper, and graduate levels, and the percent of classes with fewer than 10 enrollments was reduced at all levels. The median class sizes indicate that 50 percent of the lower level classes had more than 27 enrollments, 50 percent of the upper level classes had more than 20 enrollments, and 50 percent of the graduate classes had more than 11 stu-

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The following are course titles illustrative of those excluded from the class size analysis: Directed Individual Study, Practicum, Clinical Experience, Special Topics (variable credit and description emphasizing individual student initiative), Senior Thesis, Master's Thesis, Doctoral Dissertation, Directed Research, Cooperative Education, Supervised Teaching, Supervised Research, Applied Music (individual lessons), Recital, Special Projects, Student Teaching, Readings in _____, Senior Project, Directed Experience, Internship, Clinical Practice, Foreign Study, Honors Thesis, Supervised Field Experience, Special Work, Consultation Practice, Special Projects, Directed Readings, Specialized Study, Design Project, Workshops (individual emphasis), Off-campus (project, study), Field Work, Directed Observation, Master's Comprehensive Examination, Preliminary Doctoral Examination, Dissertation Defense, Honors Work.

TABLE 14
FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED MEASURES OF
CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF FLORIDA
FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE	
	LOWER	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES
0-9	2450	19.87	7567	29.10	9647
10-19	2137	17.33	6997	26.91	3190
20-29	3281	26.60	4904	18.86	1344
30-39	1973	16.00	2941	11.31	573
40-49	1123	9.11	1781	6.85	263
50-59	432	3.50	752	2.89	63
60-69	180	1.46	325	1.25	57
70-79	123	1.00	199	0.77	46
80-89	67	0.54	96	0.37	36
90-99	72	0.58	75	0.29	35
100+	495	4.01	362	1.39	65
TOTAL	12,333	100.00	25,999	100.00	15,319
MEAN CLASS SIZE		30.84		22.06	400.00
STANDARD DEVIATION OF CLASS SIZES		37.80		24.64	10.78
MEDIAN CLASS SIZE		25		18	14.28
PERCENT OF TOTAL ENROLLMENTS IN ALL CLASSES WITH ENROLLMENTS OF LESS THAN 10		2.15		5.28	**
					20.58

*NOTE: INCLUDES ALL COURSES.
**INTERPOLATION FOR MEDIAN IS INACCURATE. VALUE OF MEDIAN < 10.

TABLE 15
FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED MEASURES OF
CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF FLORIDA
FOR ALL DISCIPLINE BY LEVEL OF INSTRUCTION; 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE			
	LOWER	UPPER	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY		NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	
0 - 9	1,299	11.84	4.039	19.63	4,104	47.70	
10 - 19	2,049	18.65	6.066	29.48	2,430	26.24	
20 - 29	3,232	29.47	4.431	21.53	1,090	12.67	
30 - 39	1,947	17.75	2,735	13.29	491	5.71	
40 - 49	1,108	10.10	1,665	8.09	221	2.57	
50 - 59	423	3.86	702	3.41	50	0.58	
60 - 69	176	1.60	298	1.44	45	0.52	
70 - 79	119	1.08	182	0.88	43	0.50	
80 - 89	66	0.60	87	0.42	34	0.40	
90 - 99	69	0.63	66	0.32	34	0.40	
100 +	484	4.41	310	4.51	62	0.72	
TOTAL	10,968	100.00	20,579	100.00	8,604	100.00	
MEAN CLASS SIZE		33.85			24.84		14.77
STANDARD DEVIATION OF CLASS SIZES		38.64			23.69		16.46
MEDIAN CLASS SIZE		27			20		11
PERCENT OF TOTAL ENROLLMENTS IN ALL CLASSES IN CLASSES WITH ENROLLMENTS OF LESS THAN 10		1.56			3.95		14.93

*NOTE: THIS DISTRIBUTION EXCLUDES COURSES NOT CONDUCTED IN A CLASSROOM OR LABORATORY FORMAT SUCH AS DIRECTED INDIVIDUAL STUDIES, PRACTICUMS, INTERNSHIPS, APPLIED MUSIC, THESIS, DISSERTATION, SPECIAL TOPICS, ETC.

Source: Same as Table 1.

ents enrolled. The number of classes with more than 100 students enrolled declined with the level of instruction.

Class Sizes Within the HEGIS Disciplines - There are relatively substantial differences in the characteristics of the frequency distributions of class sizes among the HEGIS disciplines (see Table 16 and Appendix 2, Tables 16-1 and 16-24). Among these disciplines more than 50 percent of the classes at the graduate level enrolled fewer than 10 students in Agriculture and Natural Resources, Architecture and Environmental Design, Area Studies, Communications, Engineering, Fine and Applied Arts, Foreign Languages, Health Professions, Letters, Mathematics, Physical Sciences, and Social Sciences. Area Studies, Communications, Fine and Applied Arts, Foreign Languages, Library Science, and Interdisciplinary Studies all had high percentages of small classes at the undergraduate levels. Relatively low percentages of small classes existed in Architecture and Environmental Design, Business and Management, and Home Economics at the undergraduate levels.

Class Sizes Among the Institutions - There are considerable differences in average class sizes among the institutions, and in the percentages of classes with fewer than 10 enrollments (see Table 17).²¹ At the lower level, the University of Florida, the University of South Florida, and Florida Technological University all had the same median class size, although there were variations in the mean class sizes for these institutions. Only Florida A and M University had more than 20 percent of its lower level classes with fewer than 10

²¹ Greater detail of the characteristics of the class sizes by institution is provided in Appendix 2, Tables 17-1 - 17-9.

TABLE 16
MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
FOR THE STATE UNIVERSITY SYSTEM,
BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agriculture and Natural Resources	119.79	114.69	24.48	19.12	9.30	7.58
Architecture and Environmental Design	26.03	24.82	21.44	11.35	11.35	9.84
Area Studies	20.67	24.16	20.96	13.28	3.76	3.71
Biological Studies	42.40	52.48	24.23	27.19	11.89	9.57
Business and Management	48.35	42.92	35.52	26.05	19.09	12.22
Communications	29.45	35.30	21.28	20.50	10.24	7.12
Computer & Information Science	68.75	11.80	31.95	36.99	17.63	13.27
Education	24.94	11.96	24.29	15.79	18.11	13.19
Engineering	34.13	29.90	22.33	21.92	9.31	8.58
Fine and Applied Arts	19.58	25.29	14.84	18.56	5.48	6.49
Foreign Languages	20.59	9.83	11.76	9.99	6.25	4.56
Health Professions	48.82	40.32	24.11	21.64	19.02	26.31
Home Economics	28.20	15.14	27.45	20.14	14.95	9.67
Law	0.00	0.00	0.00	0.00	48.40	38.23
Letters	32.86	40.71	23.89	30.28	9.60	6.92
Library Science	55.67	51.68	15.50	11.93	23.87	13.87
Mathematics	37.11	35.43	27.48	20.47	9.42	8.77
Physical Science	40.38	47.39	21.00	25.21	8.32	9.00
Psychology	56.36	53.27	36.49	32.67	14.13	12.27
Public Affairs and Services	42.75	17.23	35.71	30.58	16.75	9.67
Social Science	45.43	42.34	26.85	22.25	9.56	9.00
Technology	28.63	11.01	24.17	18.35	0.00	0.00
Interdisciplinary Studies	25.88	20.79	19.59	16.01	2.67	1.53
Disciplines Not Classified	13.97	15.00	14.93	11.71	9.33	13.94
All Disciplines	33.85	38.64	24.84	23.00	14.77	16.45

*See footnotes to Table 15.
 Source: Same as Table 1.

TABLE 17
SPECIFIED MEASURES OF CLASS SIZES FOR THE INSTITUTIONS OF THE
STATE UNIVERSITY SYSTEM OF FLORIDA, 1974-75 ACADEMIC YEAR

INSTITUTION	LOWER LEVEL				UPPER LEVEL				GRADUATE		
	Mean Class Size	Median Class Size	Percent of Classes with Fewer than 10 Enrollment	Mean Class Size	Median Class Size	Percent of Classes with Fewer than 10 Enrollment	Mean Class Size	Median Class Size	Percent of Classes with Fewer than 10 Enrollment	Mean Class Size	Median Class Size
University of Florida	37.45	28.00	5.61	26.89	20.00	16.46	16.13	10.00	49.19	54.43	
Florida State University	33.67	26.00	13.48	24.86	19.00	24.98	12.28	**	**	**	
Florida A & M University	25.46	21.00	25.19	17.82	14.00	40.13	17.33	12.00	4.81	50.39	
University of South Florida	33.00	28.00	10.83	24.93	21.00	18.65	12.85	**	**	**	
Florida Atlantic University	---	---	---	22.61	20.00	18.79	16.18	12.00	45.09	45.09	
University of West Florida	---	---	---	26.19	23.00	13.52	16.74	16.00	26.69	26.69	
Florida Technological University	33.62	28.00	16.87	26.11	24.00	11.57	14.10	12.00	46.80	46.80	
Florida International University	---	---	---	24.08	22.00	15.87	20.81	19.00	22.03	22.03	
University of North Florida	---	---	---	26.30	25.00	13.44	21.39	20.00	23.71	23.71	
State University System	33.85	27.00	11.84	24.84	20.00	19.63	14.77	11.00	47.70	47.70	

*See footnote to Table 16.

**Value of Median < 10 .
Source: Same as Table 1.

enrollments. At the upper level both Florida State University and Florida A and M University had more than 20 percent of total classes with fewer than 10 students enrolled, while the University of Florida had the highest mean class size and the University of North Florida registered the highest median class size. At the graduate level Florida State University and the University of South Florida had the highest percentage of small classes. The University of North Florida had the highest mean and median class size at the graduate level, and Florida International University had the smallest percent of classes with fewer than 10 enrollments.

Variations in Class Sizes Among the Institutions by HEGIS Discipline

As might be expected from the earlier analysis of the ranges in instructional productivities, the variations in class sizes among the institutions by discipline and level are substantial (See Appendix 2, Tables 18-1 -- 18-9). At the lower level the range in mean class sizes for all disciplines is relatively narrow and amounts to only 12 students per class. On the other hand, the ranges in some disciplines are relatively great at this level. For example, the range in mean class sizes amounts to approximately 60 students per class in Psychology. At the upper level, the range of class sizes for all disciplines is narrower than at the lower level, although the ranges in some disciplines are greater than in their lower level counterparts.

At the graduate level the differences in mean class sizes among the institutions are also marked. For example, in Business and Management mean class sizes ranged from a low of 14.20 students per class at the University of Florida to a high of 30.78 students per class at the University of North Florida.

On the other hand, the range in mean class sizes in Psychology at the graduate

level was substantially lower than might be expected based on those observed at the undergraduate levels.

At an earlier point in this report institutions were ranked by instructional productivities in the disciplines and levels which were common to all.²²

A similar procedure can be employed with mean class sizes. When the institutions are ranked from the highest (1) to the lowest (2) mean class size by discipline and level, it is evident that there is no strong positive relationship between mean class size and the size of the institution, a finding similar to that relating instructional productivity to institutional size (see Table 18). A comparison of the rankings in Table 18 with those in Table 4 reveals a tendency for the ranking in instructional productivity to vary with the ranking in mean class size, although the tendency does not appear to be strong (see Table 4 on page 25). However, it should be remembered that some of the credit hours reflected in the data in Table 4 were excluded in the elimination of classes with non-classroom and non-laboratory formats leading to the mean class sizes utilized in Table 18.

Variations in Mean Class Sizes Among the HEGIS Disciplines - In the analysis of the utility of the HEGIS disciplines for measuring instructional productivity or for allocating resources, three approaches were employed.²³ A similar approach is needed to determine if there are significant differences in

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These disciplines are Biological Studies, Business and Management, Education, Fine and Applied Arts, Letters, Mathematics, Physical Science, Psychology, and Social Sciences.

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See pp. 43 - 48.

TABLE 18
RANK OF THE INSTITUTIONS IN THE STATE UNIVERSITY SYSTEM
OF FLORIDA IN AVERAGE CLASS SIZE BY SPECIFIED DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTITUTION								
	UF	FSU	FAMU	USF	FAU	UWF	FTU	FIU	UNF
Biological Studies									
Upper Level	2	6	8	3	5	1	4	7	-
Graduate	2	6	8	1	3	4	5	7	-
Business and Management									
Upper Level	1	3	5	6	8	2	7	4	9
Graduate	8	6	-	7	6	4	3	2	1
Education									
Upper Level	5	6	9	7	8	4	3	2	1
Graduate	8	9	2	6	5	7	2	1	4
Fine and Applied Arts									
Upper Level	4	6	9	2	3	5	7	8	1
Graduate	2	3	-	1	4	-	5	6	-
Letters									
Upper Level	3	6	9	1	8	5	2	4	7
Graduate	7	8	9	4	6	3	5	2	1
Mathematics									
Upper Level	1	8	9	4	6	2	3	7	5
Graduate	2	4	8	6	5	1	7	3	-
Physical Sciences									
Upper Level	1	7	4	2	8	6	3	5	5
Graduate	3	5	-	4	6	2	-	1	-
Psychology									
Upper Level	1	3	8	9	2	6	4	7	5
Graduate	7	5	6	8	9	4	2	1	3
Social Sciences									
Upper Level	6	1	9	7	5	3	4	8	2
Graduate	8	6	9	4	7	3	1	2	5
All Disciplines									
Upper Level	1	6	9	5	8	3	4	7	2
Graduate	6	9	3	8	6	4	7	2	1

*See footnote to Table 15.

Source: Same as Table 1.

mean class sizes between discipline categories.

The coefficients of variation in mean class sizes indicate substantial relative variations among the HEGIS disciplines (see Table 19). In fact the relative variations in class sizes by discipline exceed those in instructional productivities (see Table 12 on page 45). The relative variation in mean class sizes for given disciplines and levels is greater than the relative variations across disciplines for given levels for four disciplines at the lower level, four disciplines at the upper level, and one discipline at the graduate level. This represents a reduction in the number of disciplines in which the relative variation in instructional productivities between institutions exceeded the variation for all disciplines by level.

When the upper level mean class sizes are plotted by discipline, there is considerable overlap in the distributions (see Chart 3). The dispersion of the means is somewhat greater than that which existed for the average instructional productivities (see Chart 1 on page 46). Generally the overlap in the mean class size distributions is less than that for the average instructional productivities. The ranges of mean class sizes at the lower level are relatively narrow, except in Psychology (see Chart 4). There is somewhat greater overlap in the distribution of mean class sizes at the lower level than existed for the average instructional productivities (see Chart 2 on page 47).

The final test of the significance of the differences among the mean class sizes by disciplines involves the use of the decision rule employed to test the differences among the instructional productivities, i.e., employment of the t tests and utilizing an 0.05 level of significance. To track the procedure fol-

TABLE 19
COEFFICIENTS OF VARIATION IN MEAN CLASS SIZES
AMONG THE INSTITUTIONS OF THE STATE UNIVERSITY SYSTEM
BY DISCIPLINE AND LEVEL 1974-75*

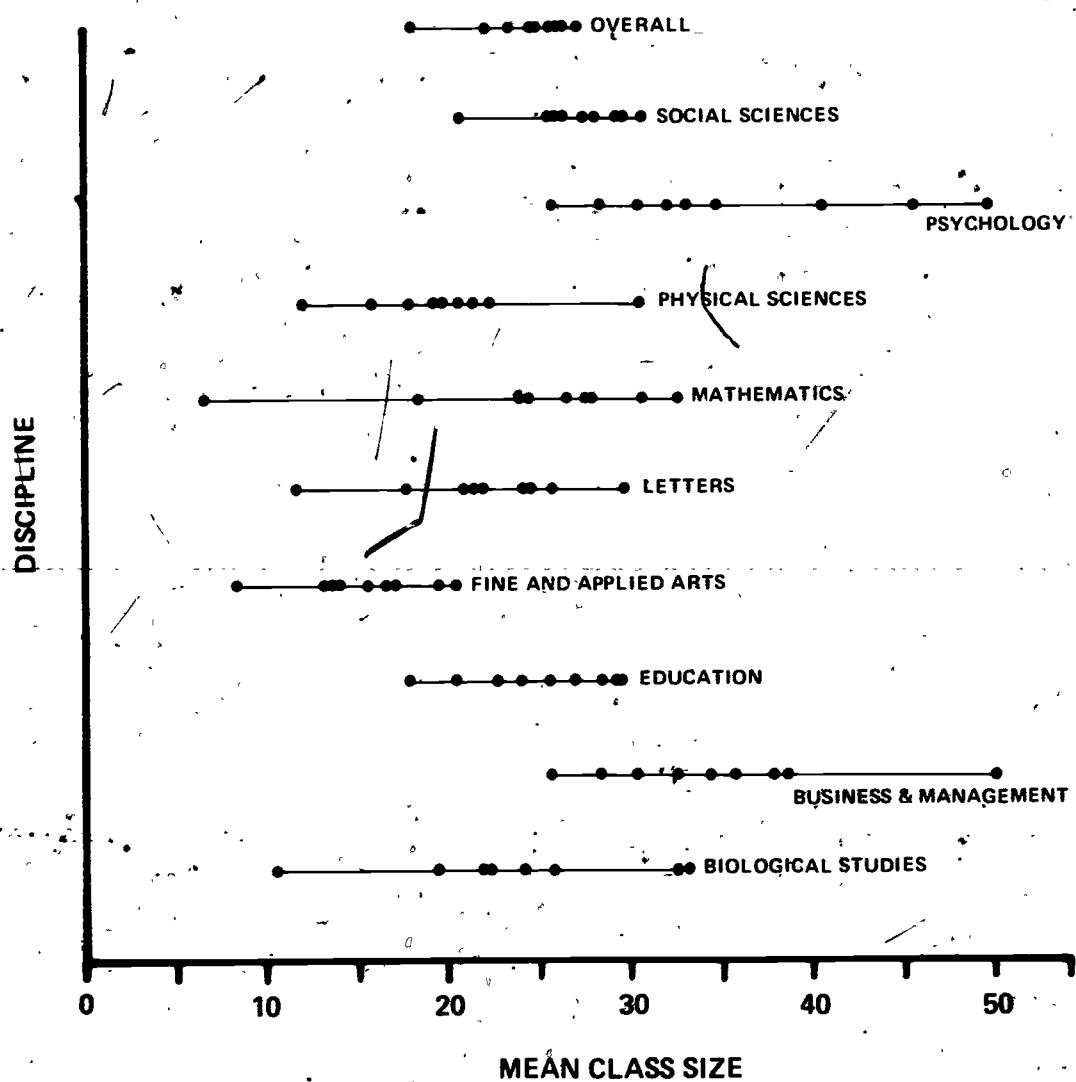
DISCIPLINE	COEFFICIENT OF VARIATION ** AT THE:		
	Lower Level (Percent)	Upper Level (Percent)	Graduate (Percent)
Agriculture and Natural Resources	95.74	78.10	81.50
Architecture and Environmental Design	95.35	52.93	86.69
Area Studies	116.88	25.42	98.67
Biological Studies	123.77	112.21	80.48
Business and Management	88.76	75.59	64.01
Communications	119.86	96.33	69.53
Computer and Information Science	30.45	115.77	75.26
Education	47.95	65.00	72.83
Engineering	87.60	98.16	92.15
Fine and Applied Arts	129.16	125.06	118.43
Foreign Languages	47.74	67.93	72.96
Health Professions	82.58	89.75	138.32
Home Economics	53.68	73.36	64.68
Law	---	---	81.24
Letters	123.88	126.74	72.08
Library Science	92.83	76.96	58.10
Mathematics	95.47	74.49	93.09
Physical Science	117.36	120.04	108.17
Psychology	94.51	89.53	86.83
Public Affairs and Services	40.30	85.63	57.73
Social Sciences	93.19	82.86	94.24
Technology	38.45	75.92	---
Interdisciplinary Studies	80.33	81.72	57.36
Disciplines Not Classified	112.31	78.43	149.41
All Disciplines	114.15	95.37	111.37

*See footnote to Table 45.

**The coefficient of variation is determined.

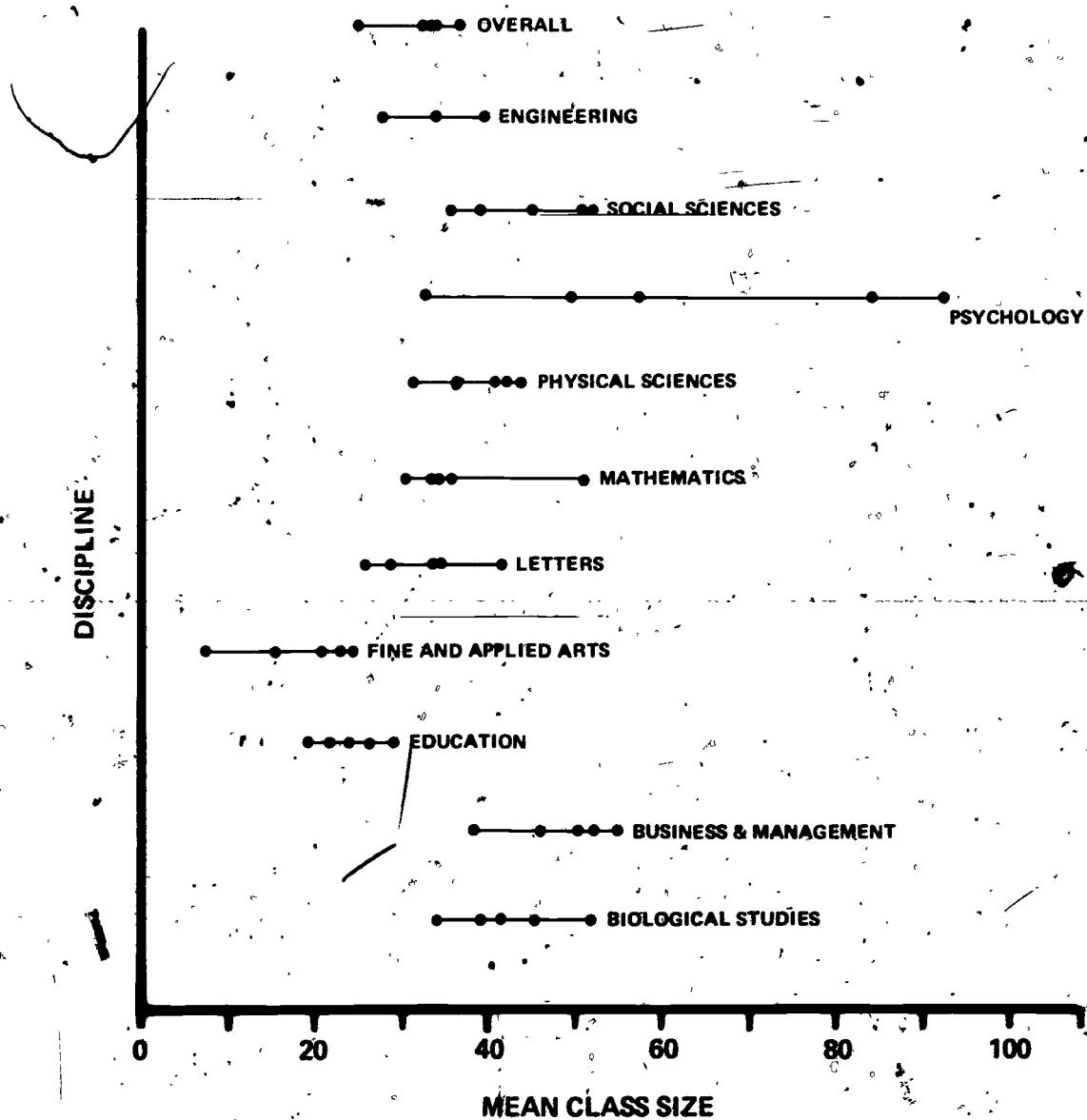
C.V. $\frac{s}{\bar{X}}$ where s = the standard deviation of the individual institution's mean productivities from the SUS mean.
 \bar{X} = the SUS mean productivity.

CHART 3
RANGE OF MEAN CLASS SIZES FOR THE INSTITUTIONS
OF THE STATE UNIVERSITY SYSTEMS OF FLORIDA AT THE
UPPER LEVEL BY SPECIFIED DISCIPLINE, 1974-75 ACADEMIC YEAR



Source: Appendix 2, Tables 18-1-18-9.

CHART 4
RANGE OF MEAN CLASS SIZES FOR THE INSTITUTIONS
OF THE STATE UNIVERSITY SYSTEMS OF FLORIDA AT THE
LOWER LEVEL BY SPECIFIED DISCIPLINE, 1974-75 ACADEMIC YEAR



Source: Same as Chart 3.

lowed earlier, the mean class size in Social Science was tested against the other disciplines depicted in Chart 3, and none of the differences were found to be significant at the 0.05 level.

Correlation Between Instructional Productivity and Class Sizes - The comparison of the rank of institutions by institution, level, and discipline in instructional productivity and mean class size suggested that there was an association (see page 59). Other discussions have directly related the two, and, intuitively, it would be concluded that there would be a strong positive relationship. In order to test for the degree and nature of this relationship, correlation and regression analysis was employed following the procedure described in pages 48 - 51.

It was concluded that the logic of the anticipated relationship between instructional productivity and mean class sizes required: (1) that the adjusted average productivities should be employed because determination of these productivities tracks the level of the course; and (2) that the means of the distribution of class sizes which included all courses should be utilized to take into account the credit hours generated in courses not employing a classroom or laboratory format.

The relationship between average instructional productivities and mean class sizes at the upper level for all nine major disciplines was found to be linear, although the regression "explained" only approximately 52 percent of the variation in instructional productivity (see Table 20). However, excepting Business and Management, Mathematics, and Physical Science, the regression of average productivity or mean class size does not yield results which are

TABLE 20
MEASURES OF THE ASSOCIATION BETWEEN AVERAGE INSTRUCTIONAL
PRODUCTIVITIES AND MEAN CLASS SIZES BY SPECIFIED DISCIPLINE
AND LEVEL, 1974-75 ACADEMIC YEAR

DISCIPLINE AND LEVEL	R ²	Regression Coefficients			
		a	b	c	d
Biological Studies Upper Level					
Business and Management Upper Level	0.6397	178.5180	8.4642		
Education Upper Level					
Fine and Applied Arts Upper Level					
Letters Upper Level					
Mathematics Upper Level	0.8630	-25.3629	13.7980		
Physical Science Upper Level	0.7478	3376.7899	-527.7048	+ 27.7657	+ 0.4560
Psychology Upper Level					
Social Sciences Upper Level					
All-Nine Disciplines Upper Level	0.5165	95.2701	+ 10.6753		

*Not statistically different from zero at the 0.05 level.

**Reduction in the sums of squares was not statistically significant at the 0.05 level.

Source: Computed from data presented in Table 5 and Appendix 2, Tables 16.1 - 16.24.

statistically significant.

Intuitively it would be expected that there would be a direct relationship between mean class sizes and instructional productivities, and the results presented in Table 20 almost defy explanation. However, there are certain factors which must be considered before it is concluded that there is no relationship between instructional productivity and class size for most disciplines. Some of the more significant of these factors are:

1. The data were available for only one academic year, which provides only nine observations of the relationship for each discipline. If additional data were available, it would be expected that there would be a direct relationship, at least over time.
2. Utilization of the mean class sizes from the data which include all courses probably does not adequately account for the effects which a significant amount of non-classroom and non-laboratory course credits may have on the apparent lack of association between the two variables. If both the average instructional productivities and mean classes were calculated from data which excluded all non-classroom and non-laboratory course credit hours, the nature of the relationship could be more adequately established.
3. For any given discipline, significant variations among the institutions in the proportions of the total course offerings comprised of non-classroom and non-laboratory course work will distort the statistical relationship between class size and instructional productivity. There do appear to be variations among the institutions which have reduced

the usefulness of the correlation and regression analysis.

4. Variations in the use of instructional technology and characteristics of physical facilities distort the apparent relationship. For example, a course might be taught by CCTV to a number of sections housed in different rooms, and the mean class size would be affected by the capacities of the rooms.
5. If there are variations among institutions or disciplines in the proportions of total instructional FTE's comprised of adjunct faculty or graduate teaching assistants, the instructional productivities will be affected in that generally more courses are taught per FTE by persons with these designations than by regular faculty.

VI

UTILIZATION OF FACULTY RESOURCES.

Faculty Tasks - As indicated earlier, the data base of the State University System provides the capabilities to determine the allocation of faculty resources by certain defined "tasks," although in the non-instructional "tasks" there is no present capability to measure output. The "tasks" are defined as: (1) Instruction; (2) Academic Counseling; (3) Research and Scholarly Activity; (4) Public and Professional Service; and (5) Academic Administration.²⁴

Allocation of Faculty Resources - An examination of the allocation of faculty resources among the institutions by "task" reveals the influence of the role and scope of the institutions, institutional priorities, and size (see Table

²⁴

See Appendix 1 for the definitions of these "tasks."

21). The proportion of total resources devoted to instruction and instruction-related (Academic Counseling) activities varies from a low of 68.7 percent at Florida State University to a high of 86.3 percent at the University of West Florida. On the other hand, the percentage of faculty resources devoted to research varies from a low of 2.1 percent at the University of North Florida to a high of 18.0 percent at Florida State University. At four of the institutions (the University of Florida, Florida State University, the University of South Florida, and Florida Atlantic University) the percent of faculty FTE's committed to research exceeded the percent allocated for this purpose.²⁵ On the other hand, the University of West Florida, Florida Technological University, and the University of North Florida utilized less than one half of the allocated resource positions for research purposes. Altogether the institutions with doctoral programs (the University of Florida, Florida State University, and the University of South Florida) account for 85 percent of the total faculty resources in the State University System committed to research.

Relatively minor proportions of faculty resources were committed to public service, excepting at Florida International University where the percentage of resources committed to this "task" exceeded the percentages committed to academic counseling at several of the other institutions.

An explanation is needed before the percentages of faculty resources de-

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See 1974-75 Allocation Document, Tallahassee, Florida Board of Regents, July, 1974, p. 15. The percentage of faculty resources allocated for research was determined by dividing formula research positions by total positions allocated. This procedure tends to underestimate the percent of faculty resources allocated to some institutions for research purposes in that some of the non-formula allocations include a research component.

TABLE 21
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK IN THE STATE UNIVERSITY SYSTEM OF FLORIDA
BY INSTITUTION, 1974-75 ACADEMIC YEAR

INSTITUTION	Percent of FTE Faculty Positions Committed to:						Public Service (percent)	Academic Administration (percent)	Total FTE Faculty
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Instruction (percent)	Academic Counseling (percent)			
University of Florida	19.65	29.96	11.44	6.85	67.92	4.61	15.46	2.64	9.35
Florida State University	15.32	27.38	13.21	7.55	63.37	5.43	17.96	3.76	9.45
Florida Agricultural and Mechanical University	28.67	44.46	5.50	—	78.63	3.87	5.03	—	12.45
University of South Florida	12.96	39.40	14.45	0.97	67.78	5.50	11.84	3.20	11.65
Florida Atlantic University	—	57.08	13.46	—	70.54	4.78	9.59	2.72	12.36
University of West Florida	—	60.68	19.52	—	80.20	6.08	3.36	1.09*	9.24
Florida Technological University	14.76	45.92	10.11	—	71.50	7.06	3.43	5.41	12.57
Florida International University	—	55.33	9.62	—	64.96	8.26	6.14	5.85	14.77
University of North Florida	—	50.08	10.97	—	67.06	8.01	2.06	1.50	21.85
State University System	13.44	38.26	12.57	3.79	68.08	5.52	12.15	3.18	11.06

Source: Same as Table 1.

voted to academic administration can be accurately interpreted. In the 1974-75 Academic Assignment/Report System, faculty resources committed to institutional governance were included in academic administration. The author is not in a position to account for the proportion of resources committed to governance activities at institutions other than the University of North Florida. However, in the case of this institution all faculty members participated in an interim governance structure and simultaneously in the development of a permanent governance arrangement during 1974-75. After deducting the faculty effort devoted to governance, the actual percentage of faculty resources committed to general academic administration (as opposed to governance) amounted to 10.46 percent of the full-time equivalent faculty positions as contrasted to the 21.35 percent indicated in Table 21. It should be noted that both Florida International University and the University of North Florida had the highest percentage of faculty resources committed to academic administration, as might be expected for new institutions where the development of institutional governance arrangements is accorded some priority, and a significant commitment is made to developmental activities in general. In any event, there appears to be a strong inverse relationship between the size of the institution and the proportion of faculty resources committed to academic administration, although the University of West Florida appears as an exception. In the case of this institution, the author strongly suspects that institutional governance activities were not adequately reflected in the reports.

Allocation of Faculty Resources by HEGIS Discipline - Not only are there wide variations among institutions in the allocation of faculty resources, but

there are even wider variations in the utilization of faculty resources among the disciplines (see Table 22). The proportion of faculty resources allocated to instruction and instruction-related activities was highest (over 80 percent) in Architecture and Environmental Design, Computer and Information Sciences, Education, Foreign Languages, Health Professions, Home Economics, and Letters. The percentage of resources devoted to instruction and instruction-related activities was lowest (below 70 percent) in Agriculture and Natural Resources, Area Studies, Law, Library Science, Physical Science, and Interdisciplinary Studies. The highest proportion of faculty utilized in research and scholarly activities was in Area Studies, Biological Studies, Engineering, Law, Mathematics, Physical Science, Psychology, and Social Science, while the largest numbers of FTE faculty resources devoted to research were in Social Sciences (105 FTE), Physical Science (96 FTE), Business and Management (74 FTE), and Biological Studies (53 FTE). In general, the percent of resources devoted to research and scholarly activities is greatest in those disciplines with the highest commitment to advanced graduate instruction.

In public and professional service, the highest percentages of FTE faculty positions were committed in Communications, Library Science, Interdisciplinary Studies, and in the Not Reported by Discipline category. The highest numbers of positions committed to the activity were in Education and Not Reported by Discipline. The highest proportions of faculty resources devoted to academic administration were in Law, Technology, and Not Reported by Discipline (general administration), and the highest numbers of faculty positions committed to academic administration were in Education and Not Reported by Discipline.

TABLE 22
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK IN THE STATE UNIVERSITY SYSTEM OF FLORIDA BY
DISCIPLINE, 1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction						Academic Counseling (percent)	Research (percent)	Public Service (percent)	Academic Administration (percent)	Total FTE (Faculty)
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Instruction (percent)						
Agricultural and Natural Resources	58.18	9.90	—	—	59.09	3.63	9.09	—	—	28.18	11.00
Architecture and Environmental Design	49.32	18.11	0.16	82.35	4.95	4.25	2.06	6.37	78.73	—	—
Area Studies	27.08	5.00	4.02	37.98	5.82	40.44	3.65	12.08	13.40	—	—
Biological Studies	30.89	11.45	9.30	64.40	5.15	20.09	2.29	8.05	282.30	—	—
Business and Management	39.36	11.76	1.50	69.46	6.64	12.02	2.23	9.62	613.93	—	—
Communications	56.57	6.70	2.30	72.80	6.34	4.06	7.38	9.40	108.29	—	—
Computer and Information Science	67.18	9.12	—	77.52	5.60	8.37	0.63	7.85	—	25.32	—
Education	42.89	22.14	6.77	76.10	5.91	5.03	3.47	9.47	983.98	—	—
Engineering	36.50	14.75	6.84	66.24	5.20	10.10	1.82	10.61	314.67	—	—
Fine and Applied Arts	44.14	7.13	1.50	72.20	3.28	12.28	3.21	9.01	397.70	—	—
Foreign Languages	28.69	7.22	3.60	80.85	3.34	10.48	0.65	4.66	170.32	—	—
Health Professions	67.12	5.43	0.76	75.99	5.13	3.14	3.70	12.02	106.94	—	—
Home Economics	49.70	10.08	4.78	75.97	8.07	5.99	2.86	7.10	58.73	—	—
Law	—	59.39	—	—	39	4.73	16.04	3.92	35.89	82.72	—
Letters	34.68	7.26	3.33	76.46	5.22	9.70	2.15	6.44	465.22	—	—
Literary Science	20.33	30.64	3.02	54.51	8.29	1.42	30.14	5.63	21.83	—	—
Mathematics	42.32	9.09	4.70	75.94	2.94	15.42	0.89	4.79	285.52	—	—
Physical Science	26.20	7.84	6.60	65.34	3.12	21.62	1.90	8.00	442.70	—	—
Psychology	37.37	19.24	6.20	67.68	5.34	16.23	3.12	7.61	185.95	—	—
Public Affairs and Services	46.66	21.17	1.73	69.61	6.78	12.22	3.30	8.06	90.68	—	—
Social Science	37.17	10.47	3.64	67.33	6.81	15.95	2.33	8.57	659.36	—	—
Technology	68.56	1.00	—	69.67	6.66	2.72	4.36	16.68	27.93	—	—
Interdisciplinary Studies	38.15	—	—	46.94	8.66	3.59	12.62	20.26	69.46	—	—
Not Reported by Discipline	—	—	—	—	12.79	12.47	11.69	63.02	231.03	—	—

Source: Same as Table 1.

The interinstitutional differences in the allocation of resources among the HEGIS disciplines are substantial (see Appendix 2, Tables 22-1 -- 22-9). The University of Florida recorded the lowest percentages of faculty resources committed to instruction and instruction-related activities in the Biological Studies, Business and Management, and Engineering in the System and the highest percentages of faculty effort in research in these disciplines. Florida State University had the lowest proportions of faculty resources devoted to instruction and instruction-related activities in the System in Fine and Applied Arts, Physical Science, and Social Science and the highest percentage of faculty effort devoted to research in these same categories (see Appendix 2, Table 18-2). The University of Florida accounted for 48 percent, 56 percent, 73 percent, 28 percent and 21 percent of the total System FTE's committed to research in Biological Studies, Business and Management, Engineering, Physical Science, and Social Sciences, respectively. Florida State University accounted for 54 percent, 38 percent, 47 percent and 48 percent of the System faculty FTE's devoted to research in Fine and Applied Arts, Mathematics, Physical Sciences, and the Social Sciences, respectively. The University of South Florida had the lowest percentage for the System of faculty effort in Mathematics devoted to instruction and instruction-related activities and the highest percent of faculty resources committed to research in this discipline (see Appendix 2, Table 18-4). This institution accounted for 38 percent of the System research faculty FTE's in Mathematics. The only other institution which had a significant research commitment from a systemwide viewpoint was Florida Atlantic University, which accounted for 8 percent of the System research

TABLE 23
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK IN THE STATE UNIVERSITY SYSTEM OF FLORIDA
BY INSTITUTION, 1973-74 ACADEMIC YEAR

INSTITUTION	Percent of FTE Faculty Positions Committed to:					Academic Counseling (percent)	Research (percent)	Public Service (percent)	Academic Administration (percent)	Total FTE Faculty					
	Instruction		Total Instruction (percent)	Advanced Graduate (percent)	Beginning Graduate (percent)										
	Lower Level (percent)	Upper Level (percent)													
University of Florida	21.48	28.80	13.57	3.28	67.13	4.21	15.13	3.39	10.09	1,560					
NOT AVAILABLE															
Florida State University															
Florida Agricultural and Mechanical University	44.31	32.98	3.42	1	80.71	21.78	5.16	3.6	10.97	304					
University of South Florida	13.97	38.88	17.05	82	70.55	6.47	9.91	3.00	10.04	940					
Florida Institute University															
University of West Florida			60.84	18.57	1	79.42	6.14	3.25	.67	10.49					
Florida Technological University	15.77	44.30	9.19	20	69.48	6.32	5.56	4.22	14.40	363					
Florida International University															
University of North Florida			54.99	11.28	1	66.27	7.96	1.34	2.49	21.91					
Staff University System										159					
NOT AVAILABLE															

Source: Same as Table 1.

effort in Engineering. The smaller institutions generally had the highest percentages of faculty resources committed to instruction and instruction-related activities in nearly all discipline categories.

Changes in the Allocation of Faculty Resources, 1973-74 -- 1974-75

For those six institutions for which data were available in 1973-74, there were relatively small shifts in faculty resources allocated among the tasks (see Table 21 and Table 23 on pages 70 and 75). The percent of resources devoted to instruction was unchanged at the University of Florida, although there were some shifts among levels. The University of South Florida, the University of West Florida, Florida Technological University, and the University of North Florida all increased the percent of faculty resources devoted to instruction, while there was a decrease at Florida A and M University, although the changes were relatively minor. There were also small changes among the institutions in the percent of faculty FTE's devoted to the other "tasks," but there was no general pattern for these changes between 1973-74 and 1974-75.

Changes in the Allocation of Faculty Resources by HEGIS Discipline, 1973-74 -- 1974-75 - There appeared to be some changes in the allocation of resources by discipline at the various institutions between 1973-74 and 1974-75 (see Appendix 2, Tables 23-1 -- 23-6 and Appendix 2, Tables 22-1 -- 22-9). However, refinement of the data system and reduction of the FTE's in the Not Reported by Discipline category make interpretation of the discipline changes between the years almost impossible.

VII

THE FACULTY ALLOCATION MODEL OF THE STATE UNIVERSITY SYSTEM OF FLORIDA

General Characteristics of the Model - While there have been some definitional changes in the way student credit hours are counted and additional changes may be anticipated, the fundamental characteristic of the allocation model employed in the System has not changed, nor will the underlying physical relationships be altered if the allocation becomes cost-based.

The model is linear and is "driven" by student credit hours. The instructional component may be summarized as follows:

$$IFTE_i = \sum_{j=1}^{24} \sum_{k=1}^4 \frac{SCH_{jk}}{\bar{P}_{jk}}$$

where: $IFTE_i$ = the number of instructional faculty positions allocated to the i^{th} institution.

SCH_{jk} = the student credit hours projected for the i^{th} institution in the j^{th} discipline at the k^{th} level.

\bar{P}_{jk} = the student credit hour productivity per instructional faculty position in the j^{th} discipline at the k^{th} level.

The overall ratios of \bar{P}_k have largely been determined by explicit policy decisions regarding the ratios of productivity by levels. The ratios of the \bar{P}_k are essentially derived from productivities realized in the various disciplines in the past in the State University System.

The non-instructional components of the faculty allocation model are generally expressed in terms of ratios to instructional positions by level which have been established by explicit policy decisions which can be summarized as follows:

1. Academic Counseling positions.

Determination of the number of faculty positions for Academic Counseling ($CFTE_i$) involves more judgemental factors than for the other components of the model. Basically the allocation reflects head-count as well as full-time equivalent students, and recognizes special program requirements.

2. Research Faculty positions ($RFTE_i$).

$$RFTE_i = \frac{IFTE_{i1} + IFTE_{i2}}{12} + \frac{IFTE_{i3}}{4} + \frac{IFTE_{i4}}{2}$$

3. Public Service Faculty positions ($PFTE_i$).

$$PFTE_i = \frac{IFTE_i}{75}$$

4. Academic Administration positions ($AFTE_i$).

$$AFTE_i = \frac{IFTE_i + CFTE_i + RFTE_i + PFTE_i}{13}$$

In the allocation process, the overall model is "constrained" so as to equate the total number of faculty positions allocated to the number appropriated, i.e., the productivities (P_i) are adjusted proportionately. The total number of faculty positions ($TFTE_i$) received by the i 'th institution would be the sum of the constrained values for the various components, i.e.,

$$TFTE_i = IFTE_i + CFTE_i + RFTE_i + PFTE_i + AFTE_i$$

It should also be noted that the denominators of the expressions deriving $RFTE_i$ and $PFTE_i$ have been changed from time to time, so as to reflect explicit policy decisions.

Simulation of the Impact of Priority Decisions by One Institution on the Allocation of Resources - The resource allocation model which has been employed in the State University System is circular in that the ratios of the productivities realized in one year determine the allocation of resources for the following year. While it cannot be argued that the relative productivities should not change as priorities are altered, the question is raised: "can or should the internal priority decisions of one institution have a significant impact on the resources allocated to the other institutions with different missions and priorities?" In order to test the hypothesis that the priority decisions of the larger institutions may have a significant impact on the resource allocation of the small institutions, a priority decision by the University of Florida was simulated. This hypothetical priority decision was similar in character to that made generally in higher education in the post-sputnik era.

In the 1974-75 academic year the University of Florida employed 468 FTE faculty positions at the upper level and 179 FTE positions at the beginning graduate level. The hypothetical resource reallocation involved the overall transfer of five percent of the resources at each level from Business and Management, Education, Fine and Applied Arts, Letters, Psychology, and the Social Sciences to Biological Studies, Computer and Information Sciences, Engineering, Mathematics, and Physical Science (see Table 24). This transfer obviously effects an increase in productivity for those disciplines losing faculty resources and a decrease in productivity in the gaining disciplines within the institution. However, because of the proportion of total System resources accounted for by the University of Florida, this shift in resources also has a

TABLE 24
ADJUSTMENTS IN THE ALLOCATION OF FACULTY RESOURCES COMMITTED
TO INSTRUCTION AMONG DISCIPLINES AT THE UNIVERSITY OF FLORIDA
TO REFLECT HYPOTHETICAL PRIORITY DECISIONS
AT THE UPPER AND BEGINNING GRADUATE LEVELS

DISCIPLINE	UPPER LEVEL		BEGINNING GRADUATE	
	Actual Utilization of FTE Faculty Positions per Quarter	Hypothetical Utilization of FTE Faculty Positions per Quarter	Actual Utilization of FTE Faculty Positions per Quarter	Hypothetical Utilization of FTE Faculty Positions per Quarter
Agriculture and Natural Resources	(FTE Positions)	(FTE Positions)	(FTE Positions)	(FTE Positions)
Architecture and Environmental Design	35.60	35.60	8.97	8.97
Area Studies	0.22	0.22	0.27	0.27
Biological Studies	19.69	23.69	6.36	7.36
Business and Management	35.93	31.93	14.06	12.06
Communications	24.70	24.70	2.55	2.55
Computer and Information Science	6.37	7.37	—	—
Education	80.41	73.41	31.63	27.63
Engineering	59.42	68.83	26.88	31.82
Fine and Applied Arts	22.57	19.57	2.72	2.72
Foreign Languages	8.98	8.98	2.92	2.92
Health Professions	—	—	—	—
Home Economics	—	—	—	—
Law	—	—	35.57	35.57
Letters	38.96	34.55	10.41	9.40
Library Science	—	—	—	—
Mathematics	45.75	48.75	8.70	9.70
Physical Science	19.17	25.17	8.40	10.40
Psychology	11.14	10.14	7.21	6.32
Public Affairs and Services	0.38	0.38	—	—
Social Science	35.02	31.02	12.22	11.22
Technology	—	—	—	—
Interdisciplinary Studies	23.88	23.88	—	—
Total FTE Positions	468.19	468.19	178.86	178.86

Source: Same as Table 1.

significant effect on the State University System productivities in the affected discipline categories (see Table 25). Thus, this hypothetical priority decision by the University of Florida modifies the System disciplinary productivities and would subsequently result in a reallocation of resources among the State University System universities, as long as enrollment mix in the various disciplines varies among the institutions.

The impact of the hypothetical priority decision on the resources made available to other institutions can be illustrated as follows. The 1975-76 projected student credit hours by discipline for the University of North Florida (the smallest institution in the System) were divided by the 1974-75 actual productivities in the State University System and the System productivities as altered by the hypothetical priority decision on the part of the University of Florida. Based on the actual 1974-75 System productivities, the University of North Florida would receive in 1975-76 107.16 upper and 41.16 beginning graduate level FTE faculty positions. With the altered System productivities the University of North Florida would receive 106.81 upper and 40.20 beginning graduate level FTE faculty positions, a reduction of 0.88 percent (see Table 26). When the current budget formula ratios for Research, Public Service, and Academic Administration are employed, the total reduction in faculty staffing for the University of North Florida resulting from the hypothetical reallocation of faculty resources at the University of Florida would amount to 1.72 FTE faculty positions. In addition, the University of North Florida would receive less support positions and operating expense funds. Similar results would be obtained if the University of Florida were to shift faculty resources

TABLE 25
 PRODUCTIVITY OF FACULTY RESOURCES AT THE
 UNIVERSITY OF FLORIDA AND IN THE STATE UNIVERSITY SYSTEM AFTER
 HYPOTHETICAL PRIORITY DECISION AT THE UNIVERSITY OF
 FLORIDA

DISCIPLINE	University of Florida				State University System			
	Upper Level		Beginning Graduate		Upper Level		Beginning Graduate	
	Adjusted Student Credit Hours per FTE Faculty Position per Quarter	Percent Change in Adjusted Productivity From Actual (Percent)	Adjusted Student Credit Hours per FTE Faculty Position per Quarter	Percent Change in Adjusted Productivity From Actual (Percent)	Adjusted Student Credit Hours per FTE Faculty Position per Quarter	Percent Change in Adjusted Productivity From Actual (Percent)	Adjusted Student Credit Hours per FTE Faculty Position per Quarter	Percent Change in Adjusted Productivity From Actual (Percent)
Agriculture and Natural Resources	---	---	---	---	---	---	---	---
Architecture and Environmental Design	NC	NC	NC	NC	NC	NC	NC	NC
Area Studies	NC	NC	NC	NC	NC	NC	NC	NC
Biological Studies	288	-16.87	103	-13.50	296	4.70	89	3.20
Business and Management	692	+12.55	174	+16.58	492	+1.35	188	+2.85
Communications	NC	NC	NC	NC	NC	NC	NC	NC
Computer and Information Science	388	13.57	---	---	430	5.58	---	---
Education	360	+9.54	201	+14.50	400	+1.69	160	+1.87
Engineering	196	-13.57	111	-15.52	248	7.74	92	-9.68
Fine and Applied Arts	196	+15.36	NC	NC	234	+1.74	NC	NC
Foreign Languages	NC	NC	NC	NC	NC	NC	NC	NC
Health Professions	---	---	---	---	---	---	---	---
Home Economics	---	---	---	---	---	---	---	---
Law	---	---	NC	NC	---	---	NC	NC
Letters	413	+12.77	166	+10.67	386	+2.88	134	+3.13
Library Science	---	---	---	---	---	---	---	---
Mathematics	308	-6.15	125	-10.27	343	-2.42	96	-3.70
Physical Science	213	-23.82	87	-19.20	228	-4.91	103	-6.57
Psychology	714	+9.88	103	+14.13	585	+1.46	127	+2.56
Public Affairs and Services	NC	NC	NC	NC	NC	NC	NC	NC
Social Science	442	+12.92	168	+8.97	378	+1.86	135	+1.48
Technology	---	---	---	---	---	---	---	---
Interdisciplinary Studies	NC	NC	NC	NC	NC	NC	NC	NC

Source: Calculated from data included in Table 24.

TABLE 26
 PROJECTED STUDENT CREDIT HOURS BY DISCIPLINE AND LEVEL FOR THE
 1975-76 ACADEMIC YEAR AT THE UNIVERSITY OF NORTH FLORIDA AND
 ESTIMATED ALLOCATION OF FTE TEACHING POSITIONS TO THE INSTITUTION
 BY DISCIPLINE AND LEVEL USING 1974-75 ACTUAL AND ALTERED STATE
 UNIVERSITY SYSTEM FACULTY PRODUCTIVITIES

DISCIPLINE	Projected Upper Level Credit Hours 1975-76 per Quarter	Projected Beginning Graduate Credit Hours 1975-76 per Quarter	FTE Upper Level Teaching Positions Based On Actual 1974-75 Productiv- ities	FTE Upper Level Teaching Positions Based On Altered 1974-75 Productiv- ities	FTE Beginning Graduate Teaching Positions Based On Actual 1974-75 Productiv- ities	FTE Beginning Graduate Teaching Positions Based On Altered 1974-75 Productiv- ities
Agriculture and Natural Resources	---	---	---	---	---	---
Architecture and Environmental Design	---	---	---	---	---	---
Area Studies	---	---	---	---	---	---
Biological Studies	---	---	---	---	---	---
Business and Management	9,415	1,898	19.39	19.13	10.36	10.08
Communications	---	---	---	---	---	---
Computer and Information Science	---	---	---	---	---	---
Education	12,118	2,281	30.84	30.32	14.50	14.23
Engineering	1,133	---	4.20	4.56	---	---
Fine and Applied Arts	2,066	---	8.97	8.81	---	---
Foreign Languages	---	---	---	---	---	---
Health Professions	---	---	---	---	---	---
Home Economics	---	---	---	---	---	---
Law	---	---	---	---	---	---
Letters	2,295	210	5.96	5.79	1.61	1.56
Library Science	---	---	---	---	---	---
Mathematics	2,434	---	6.91	7.08	---	---
Physical Science	2,555	---	10.63	11.18	---	---
Psychology	3,618	1,625	6.50	6.40	13.14	12.80
Public Affairs & Services	---	---	---	---	---	---
Social Science	5,134	206	13.76	13.54	1.55	1.53
Technology	---	---	---	---	---	---
Interdisciplinary Studies	---	---	---	---	---	---
Total Teaching Positions			107.16	106.81	41.10	40.20

*Counted in Physical Sciences

**Counted in Mathematics

Source: Calculated from data presented in the 1974-75 University of North Florida Operating Budget and Table 25.

from Instruction to the Research and Scholarly Activities, Public Service, or Academic Administration activities, or if there were a shift in the distribution of students among the disciplines at the University of Florida which was not paralleled at the other institutions.

Other Significant Characteristics of the Model - There are other significant attributes of the model which should be identified in order to fully appraise its validity.

1. The productivities derived by discipline represent a weighted "consensus" for the State University System. The characteristics of this "consensus" are influenced by the relative sizes of the institutions, their roles and scopes, the internal priorities of the institutions, the length of time that the institutions have been in operation, and student demands. The "consensus" does not represent the situation at any given institution, although it is more nearly representative of the larger universities.
2. The circularity of the model gives rise to a situation which bestows relative rewards for disciplines with constant or declining productivities and penalizes disciplines with increasing productivities, regardless of the reasons for the productivity changes. Unless judgments are made and the realized productivities are altered the model is totally circular.
3. The allocation model is linear in all its dimensions and thus does not recognize the effects of:
 - a. the joint production processes between levels of instruction and

faculty activities.

- b. ~~nonlinearity of the relationship between outputs and inputs of faculty effort for given activities, disciplines, or levels of instruction.~~
- c. ~~economies of scale (institutional size).~~

In connection with the last point, it may be helpful to relate to the work of others. Carlson has shown that a joint production situation exists between levels of instruction.²⁶ The existence of joint production has never been recognized in the funding formulas of the State University System of Florida, where, for example, it is implicitly assumed that an upper division costs the same for an institution with a lower division as for an upper level institution. Furthermore, Carlson and others have adequately demonstrated that there are economies associated with increasing size of institution, at least over some range of institutional sizes.²⁷ The model described above implicitly assumes that an infinitely small institution could exist with the same ratios of inputs to outputs as for a very large institution.

- 4. Beyond the faculty allocation model itself, a significant part of the total resources allocated to support the conduct of Instruction, Academic Counseling, Research and Scholarly Activity, Public Service,

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Daryl E. Carlson, The Production and Cost Behavior of Higher Education Institutions, Berkeley: Ford Foundation Program for Research in University Administration, December, 1973, p. 83.

27

Ibid, p. 84.

and Academic Administration is derived in a direct and linear fashion from FTE faculty positions. For example, the non-academic support positions and expense dollars in the Instructional and Research budgetary function are allocated on the basis of fixed rates to faculty positions.

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The reader is referred to the 1974-75 Allocation Document of the State University System of Florida, Tallahassee: Florida Board of Regents, July, 1973, for the total elements in the resource allocation model.

Appendix 1

**The Faculty Activity Assignment/Report System
of the
State University System of Florida**

and

Comments on the Quality of the Data

The Faculty Activity Assignment/Report System
of the State University System of Florida

Objectives and Characteristics of the Faculty Activity Assignment/Report

System - The system was designed by an interinstitutional task force with the intent of meeting several objectives. The more significant of these objectives are to:

1. provide the institutions with a management information system which could be adapted to the needs of the individual institutions.
2. provide the Board of Regents with the capability of monitoring institutional resource utilization for compliance with good management practice, legislative intent and Board policy.
3. provide "cross-walk" capability with other System data files such as the Instructional Activity File, the Authorized Position File, the Student Data Course File, and the Payroll-Personnel File.

The Faculty Activity Assignment/Report System consists of four components:

(1) Instructions; (2) Definitions; (3) Weights (used to establish compliance with the "12-hour law" passed by the Florida Legislature); and (4) a Model Form.

Extracts of these components are attached to assist the reader in interpretation of the data.²⁹

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There were some modifications of the Faculty Activity Assignment/Report System in 1975-76. The essential elements of the changes were to provide for assignments at the beginning of each term and for reports of activities at the conclusion of the term. In addition, institutional governance was separated from the Academic Administration activity.

Quality of Data Obtained from the Faculty Activity Assignment/Report

System.- There are several factors which tend to introduce errors into the data which the System provides. Some of the more significant of these factors are:

1. Apportioning the full-time equivalents (FTE's) among the various activities relies substantially on the professional judgement of the department chairpersons and the extent of the consultation with individual faculty members.
2. Implementation by the various institutions was not totally uniform as to procedures and institutional instructions.
3. Resistance by faculty members and department chairpersons led to perfunctory compliance in some cases.
4. The 1974-75 allocation of FTE's among the various activities reflected assignments made at the beginning of each quarter rather than activities actually performed during the course of each quarter.
5. The nature of what comprised an FTE was subject to some variability and there was some variation in hours worked per week and time between reported FTE's.
6. There was some variation in the treatment and reporting of institutional governance activities among the institutions.
7. Utilization of a significant proportion of graduate teaching assistants or faculty adjuncts tended to distort the productivities in that typically more courses (and thus greater productivity) are obtained from an FTE graduate teaching assistant or faculty adjunct position than from an FTE regular faculty position.

8. Variations in productivity among the institutions were introduced by the availability and utilization of professional staff, contract and grant faculty, faculty from budgetary units not included in the Educational and General category, and "courtesy" faculty.
9. Significant variations in the standard teaching loads for full-time teachers can introduce concomitant variation in productivities.

It is not the author's intent to treat each of the "weaknesses" enumerated above individually. However, comments are in order on some. First, reliance on the professional judgement of department chairpersons probably yielded better data overall than a strictly mechanical approach. Second, the variances of actual duties performed from those which were assigned probably are not significant, on balance, over the course of a 10-week quarter. Third, most studies have reported discipline-oriented differences in the average hours worked per week by faculty which are not reflected in any kind of full-time equivalency statement.³⁰ And finally, given the 12-hour teaching requirement (or equivalent in instruction-related activities) imposed by the Legislature for full-time teachers, the impact of variation in teaching loads among the institutions is at least reduced.

On balance, the author's judgement is that the data derived from the Faculty Activity Assignment/Report System are reliable for the major purposes

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See, for example, Howard R. Bowen and Gordon K. Douglas, Efficiency in Liberal Education, Berkeley: Carnegie Commission on Higher Education, 1971, pp. 24 and 25.

of this study. Because many of the "errors" introduced by the factors enumerated above may tend to "wash out" as the data are aggregated, the degree of reliability is probably directly related to the level of aggregation.

State University System of Florida
Faculty Activity Assignment/Report System

Part I

The Faculty Activity Assignment/Report System was designed to incorporate requirements imposed by the Florida Legislature, BOR requirements, and the anticipated requirements of the individual institutions while providing maximum flexibility for SUS institutions. Because of the wide variations in both philosophies and requirements among the institutions the Model Form was "over-designed" and it is not anticipated that any individual institution would use the Form in its entirety or in the exact format.

Instructions

- A. The Faculty Activity Assignment/Report should be completed on each member of the following groups:
 - 1. Faculty on all state budgets, contract and grant faculty, adjunct faculty, and "courtesy" faculty actually participating in university programs.
 - 2. A&P personnel engaged in teaching.
 - 3. Graduate Assistants, Teaching Assistants and Associates, and Research Assistants and Associates.
 - 4. Career Service personnel engaged in teaching.
- B. The System is primarily designed as a report of assignments, although it provides the capability of reporting the actual use of faculty resources after the fact. Assignment data is to be reported as of the close of the "drop/add" period specified in the institution's schedule. This data is to be reported in the SUS Academic Assignment file. In reporting on the Academic Assignment file the data should not be "forced" to reconcile with the budgetary allocation by task factors.
- C. Within the framework of the definitions, weights, and external and internal requirements it is absolutely essential that the professional judgement of the chairperson be relied on in assessing workloads and apportioning FTE's.

D. The FTE assigned to an individual faculty member will have a value greater than 1.0 FTE when the faculty member is teaching credit continuing education courses on an overload basis and is receiving overload compensation. The fraction of the FTE assigned in excess of 1.0 will be determined on the basis of the department chairperson's judgement.

E. The model Faculty Activity Assignment/Report form contains many items which are optional with the institutions. The optional components are specified below (a copy of the Model Form with optional elements indicated is attached):

1. The use of Actual and Assigned Hours columns is optional.
2. Reporting of Actual FTE's (after the fact) devoted to the various task elements is optional.
3. Reporting of the names of students in the Thesis/Dissertation Supervision element is optional.
4. In general, the detail of the form is optional provided that assigned FTE's to Instructional Activities, Research and Scholarly Activities, Public and Professional Service, Academic Advisement, and Academic Administration are reported; contact hour equivalencies of instructional activities other than classroom teaching are indicated; and the capability of cross-walk with the Instructional Activity File, Academic Assignment File, Authorized Position File, etc., is maintained.

EXTRACT

D-5-3

Part II

Faculty Activity Assignment/Report

Definitions

A. Definitions: Activities

ASSIGNED ACTIVITIES -- those activities assigned by the appropriate university officer or those arising from the general obligations of faculty members, e.g., service on departmental, college, or university committees, or participation in institutional governance.

1. **INSTRUCTIONAL ACTIVITIES** -- activities which directly relate to academic programs of students and result in the generation of student credit hours (excludes course and teaching methodology development -- see item E).

A. Scheduled Teaching -- classroom and/or laboratory teaching which appears as regularly scheduled courses in the official schedule of courses of the institution. This activity relates to numbered courses and involves preparation, lectures and conduct of classes, supervising laboratory work, evaluating student efforts, necessary conferences with and tutoring of students. When scheduled teaching is conducted on a team basis, the appropriate proportion of the activity is to be assigned to individual team members. Supervision of teaching assistants when registered for credit will be covered in item D and are not considered team teaching. Supervision of junior staff not covered in item D will be considered team teaching.

B. Thesis Supervision -- service on masters supervisory committees of graduate students. This service may be as chairperson or as a member of the committee. Student must be registered for credit for masters research.

Dissertation Supervision -- service on the doctoral supervisory committees of advanced graduate students. This service may be as chairperson, or as a member of the committee. Student must be registered for credit for doctoral research.

C. Other Unscheduled Teaching

- (1) Directed Individual Studies -- the conduct of credit teaching on an informal, individual basis where the faculty member meets with students, makes assignments, reviews progress, and evaluates achievements. Students, graduate and undergraduate, must be registered on a one-to-one basis, with the faculty member.
- (2) Supervision of Student Interns -- this activity involves the placement of students in an internship situation, the supervision and evaluation of interns, the conduct of seminars for student interns, and counseling with student interns. The student interns must be registered for credit for the internship.
- (3) Supervision of Cooperative Education Students -- this activity involves the placement of cooperative education students in a supervised work experience for credit, the evaluation of student progress, the conduct of seminars for cooperative education students, and counseling with cooperative education students. The student must be registered in the cooperative education program courses.
- (4) Clinical Teaching -- may be assigned only to faculty in medicine, dentistry and veterinary medicine who are teaching in a clinical situation. This activity does not usually involve registration for credit. 107

(5) Other -- that activity not included in other categories specifically approved by the Academic Vice President as an instructional activity.

D. Supervision of Graduate Students Registered for Supervised Teaching/Research -- this activity involves the supervision of teaching or research by graduate students (other than Dissertation Research or Directed Individual Study) only when the students are registered for credit for these activities.

E. Course, Materials and Teaching Methodology Development -- this activity involves the development of new approaches, improvement of materials for individual credit courses, including audio-visual methods and materials in support of individual credit courses, and experimentation with teaching methodologies as applied to individual credit courses. Specific course or materials being developed must be described.

F. Other Instructional Activities -- unusual instructional activities approved by academic vice president and not included in other categories.

2. RESEARCH: SCHOLARLY AND CREATIVE ACTIVITIES

A. Scholarly and creative activities necessary to maintain professional competency and teaching effectiveness.

B. Artistic Creativity and Performance -- this activity involves the creation of works of art or the development of and participation in the performance of plays, music, etc.

C. State Funded (E&G) Research -- research funded out of the educational and general portion of the budget. University matching contributions to contracts and grants are to be included when these matching contributions involve research time charged to educational and general funds.

D. Contract and Grant Research -- research funded from sources outside the institution.

3. PUBLIC AND PROFESSIONAL SERVICE -- Included in this activity are:

A. Services to Students Unrelated to Credit Instruction -- these activities involve contact with students in regard to personal matters, sponsoring student organizations and extracurricular activities, and remedial instruction to enhance overall academic skills of students.

B. Non-Credit Instruction -- this activity involves instruction to the continuing education program of the institution.

- (1) C.E.U. Instruction -- the non-credit instruction is classified as "C.E.U. Instruction" when Continuing Education Units are awarded the participants.
- (2) Non C.E.U. Instruction -- those continuing education activities for which C.E.U.'s are not awarded.

C. Professional Organizations -- this activity involves participation in professional organizations or meetings associated with the faculty member's academic discipline, e.g., service as a member of the editorial board of a scholarly journal or service as an officer in a professional organization.

D. Service to the University -- this activity involves special assignments, e.g., alumni affairs, fund raising, institutional developmental activities, consultation (non-administrative activities) relationships to university offices and units.

E. Agricultural Extension -- participation in Cooperative Extension Service activities.

F. Service to the Community or State -- special assignments which extend the services of faculty members to the community, the state, or the nation, e.g., participation as a member of advisory boards.

G. Other Service -- other external service assignments not covered above.

4. ACADEMIC ADVISEMENT -- this activity involves formal counseling with students on academic course or program selection and scheduling or career counseling when conducted by a faculty member.

5. ACADEMIC ADMINISTRATION -- supervisory, management, or staff activities related to the administration of a department, college, or university. Included in this activity are:

- A. Curriculum Development and Evaluation -- participation in the development or evaluation of total curricula including the development of planning authorization requests for new degree programs and proposals for new degree programs. Service as a member of curriculum committees shall be included in this category.
- B. Faculty Evaluation System -- participation in the institution's faculty evaluation system on an individual assignment basis or as a member of a committee charged with the responsibility for the development, implementation and conduct of faculty evaluation.

C. Department, College, and University Governance -- participation in the general governance of the unit or institution in accordance with the institution's constitution. Limited to participation in the legislative processes of the unit or institution and service on committees associated with the legislative processes.

- (1) Department
- (2) College
- (3) University

D. General Academic Administration -- supervisory, management, or staff activities related to the administration of a department, college, or university.

TOTAL ASSIGNED ACTIVITY -- the total of all assigned activities.

NON-ASSIGNED ACTIVITIES -- those activities and services performed on behalf of the institution or the academic discipline which are not reflected in the specific assignments of faculty members. May include, but is not limited to, professional consulting activity, civic activity and community service, professional development, individual research or creative activity, and service to organizations and individuals.

B. Supplemental Definitions

Scheduled Contact Hours -- the contact hours formally described in the official catalog course description and provided for in the official schedule of courses of the institution. Example: Lecture - 2 hours; Discussion - 2 hours; laboratory - 4 hours.

Assigned Hours -- the estimated clock hours per week to be devoted to the activity. In the case of teaching activities the estimate will include estimated time required for course preparation, evaluation of student progress, meeting with individual students in connection with course content, etc.

Actual Hours -- the clock hours per week actually devoted to the activity. To be determined after all or a major portion of the term has been completed. Completion of this column is at the option of the individual institution.

Contact Hour Equivalent -- the equivalent to Scheduled Contact Hours as established by the department chairperson in consultation with the faculty member utilizing the schedule of weights given in Part III.

Project Number -- the number given by the individual institution to Research-Scholarly and Creative Activities funded from educational and general funds. The development of a project number system is optional with the institution at this time.

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FACULTY ACTIVITY ASSIGNMENT / REPORT
MODEL FORM

D-4-1

Name _____ Rank _____
Term _____ Year _____ Department _____ Discipline Code _____
Account No. _____

Social
Security
Number

ASSIGNED ACTIVITIES (use additional pages for each category if needed)

1. Instructional Activities

A. Scheduled Teaching - classroom and/or laboratory

Course Prefix and Number	Section Number	Course Credit Hours	Scheduled Contact Hours	Scheduled Contact Hours Credited to Faculty Member
Sub Total				

* will differ from scheduled contact hours when other faculty or staff are assigned to part of the scheduled contact hours

OPTIONAL

Assigned Hours	Actual Hours

B. Thesis/Dissertation Supervision

OPTIONAL

Name of Student	Doctoral Candidate (✓)	Masters Candidate (✓)	Committee Chairman (✓)	Committee Member (✓)	Contact Hour Equivalent
Sub Total					

OPTIONAL

Assigned Hours	Actual Hours

C. Other Unscheduled Teaching

1. Directed Individual Studies	2. Supervision of Student Interns	3. Supervision of Coop. Ed. Students	4. Clinical Teaching	5. Other	Contact hour equivalent for all Other Unscheduled Teaching
INDICATE NUMBER OF STUDENTS IN EACH CATEGORY					
Sub Total					

OPTIONAL

Assigned Hours	Actual Hours

D. Supervision of Graduate Students Required for Supervised Teaching/Research

Course Prefix and Number	Number of Graduate Students Registered	Contact Hour Equivalent
Sub Total		

OPTIONAL

Assigned Hours	Actual Hours

E. Course, Materials, and Teaching Methodology Development

Description of activity (including course prefix and number or level of course)	Contact Hour Equivalent	
Sub Total		

OPTIONAL

Assigned Hours	Actual Hours

F. Other Instructional Activities

Description of Activity (including level)	Contact Hour Equivalent	
Sub Total		

Contact Hour Equivalent

OPTIONAL

Assigned Hours	Actual Hours

TOTAL INSTRUCTIONAL ACTIVITIES (A + B + C + D + E + F)

L11

FTE DEVOTED TO INSTRUCTIONAL ACTIVITIES:

99

99

99

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Research - Scholarly and Creative Activities

Project Number	Description of Activity	Assigned Hours	Actual Hours
TOTAL			

OPTIONAL

FTE DEVOTED TO RESEARCH

OPTIONAL

Assigned	Actual

3. Public and Professional Service

Description of Activity	Assigned Hours	Actual Hours

TOTAL

OPTIONAL

FTE DEVOTED TO PUBLIC AND PROFESSIONAL SERVICE

Assigned	Actual

4. Academic Advisement

Description of Activity (including number of advisees)	Assigned Hours	Actual Hours

TOTAL

OPTIONAL

FTE DEVOTED TO ACADEMIC ADVISEMENT

Assigned	Actual

5. Academic Administration

Description of Activity (identify committee assignments)	Assigned Hours	Actual Hours

TOTAL

OPTIONAL

FTE DEVOTED TO ACADEMIC ADMINISTRATION

Assigned	Actual

OPTIONAL

TOTAL HOURS-ALL ASSIGNED ACTIVITIES (1 + 2 + 3 + 4 + 5)

Assigned Hours	Actual Hours

TOTAL FTE-ALL ASSIGNED ACTIVITIES (1 + 2 + 3 + 4 + 5)

Assigned	Actual

OPTIONAL

NON-ASSIGNED ACTIVITIES (use additional pages if needed)

Identify and describe:

Signed _____ (Faculty member)

Signed _____ (Department Chairman)

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APPENDIX 2
STATISTICAL TABLES

TABLE 3-1
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC COUNSELING
AT THE UNIVERSITY OF FLORIDA, BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling FTE Students per FTE Faculty Pos
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos				
Agriculture and Natural Resources	---	---	---	---	
* Architecture & Environmental Design	303	241	165	67	318
Area Studies	---	708	156	402	140
Biological Studies	523	347	119	90	403
Business and Management	668	615	149	87	338
Communications	526	316	167	67	174
Computer and Information Science	---	449	---	---	308
Education	260	329	175	132	357
Engineering	204	226	131	79	176
Fine and Applied Arts	200	170	88	132	537
Foreign Languages	402	137	117	72	480
Health Professions	---	---	---	---	---
Home Economics	---	---	---	---	---
Law	---	---	388	---	692
Letters	455	367	150	101	455
Library Science	---	---	---	---	---
Mathematics	625	424	139	67	1,174
Physical Science	429	279	108	106	490
Psychology	1,224	650	96	127	466
Public Affairs and Services	---	3,533	---	---	•
Social Science	543	391	155	89	452
Technology	---	---	---	---	---
Interdisciplinary Studies	---	29	---	---	14
Not Reported by Discipline	---	---	---	---	•

*Either numerator or denominator is 0.
 Source: Same as Table 1.

TABLE 3-2
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC COUNSELING
AT FLORIDA STATE UNIVERSITY, BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling FTE Students per FTE Faculty Pos.
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduates	
	Student Credit Hours per FTE Faculty Pos.				
Agriculture and Natural Resources	---	---	---	---	---
Architecture & Environmental Design	867	775	257	551	643
Area Studies	---	2,106	163	600	198
Biological Studies	603	175	86	81	178
Business and Management	508	537	204	144	289
Communications	419	480	89	44	273
Computer and Information Science	---	---	---	---	---
Education	162	443	143	146	255
Engineering	---	---	---	---	---
Fine and Applied Arts	304	328	171	136	284
Foreign Languages	298	146	96	72	459
Health Professions	---	177	97	115	363
Home Economics	389	322	163	92	182
Law	---	---	405	---	203
Letters	443	380	161	159	222
Library Science	282	314	238	306	121
Mathematics	462	256	119	92	489
Physical Science	426	200	149	83	300
Psychology	1,142	811	116	131	389
Public Affairs and Services	376	517	153	129	273
Social Science	588	433	134	93	259
Technology	---	---	---	---	---
Interdisciplinary Studies	18	---	---	---	92
Not Reported By Discipline	---	---	---	---	---

*Either numerator or denominator is 0.

Source: Same as Table 1.

TABLE 3-3
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC COUNSELING
AT FLORIDA A & M UNIVERSITY, BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling FTE Students per FTE Faculty Pos.
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	
Agriculture and Natural Resources	---	32	53	---	35
Architecture & Environmental Design	167	200	---	---	3
Area Studies	---	---	---	---	---
Biological Studies	840	426	---	---	2,388
Business and Management	188	471	---	---	4
Communications	---	---	---	---	1
Computer and Information Science	---	---	---	---	1
Education	588	336	226	---	655
Engineering	---	---	---	---	1
Fine and Applied Arts	94	94	---	---	536
Foreign Languages	164	26	---	---	231
Health Professions	283	200	---	---	366
Home Economics	456	239	104	---	160
Law	---	---	---	---	1
Letters	399	130	14	---	594
Library Science	---	116	140	---	243
Mathematics	567	32	52	---	1,098
Physical Science	597	233	---	---	1
Psychology	824	387	115	---	291
Public Affairs and Services	---	---	---	---	1
Social Science	689	326	49	---	785
Technology	8,000	39,722	---	---	1
Interdisciplinary Studies	---	8,785	---	---	1
Not Reported by Discipline	---	---	---	---	1

*Either numerator or denominator is 0.
 Source: Same as Table 1.

TABLE 3-4
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC COUNSELING
AT THE UNIVERSITY OF SOUTH FLORIDA, BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	FTE Students per FTE Faculty Pos
	Student Credit Hours per FTE Faculty Pos				
Agriculture and Natural Resources	---	---	---	---	---
Architecture & Environmental Design	---	---	---	---	---
Area Studies	464	263	---	---	141
Biological Studies	774	483	76	103	379
Business and Management	635	417	117	---	383
Communications	---	325	---	---	209
Computer and Information Science	---	---	---	---	---
Education	414	405	145	419	231
Engineering	342	318	62	425	172
Fine and Applied Arts	211	280	59	---	485
Foreign Languages	326	211	39	---	873
Health Professions	---	267	---	---	346
Home Economics	---	---	---	---	---
Law	---	---	---	---	---
Letters	483	432	95	104	497
Library Science	---	---	---	---	---
Mathematics	699	420	51	266	876
Physical Science	488	323	71	70	902
Psychology	1,410	521	106	160	379
Public Affairs and Services	---	---	---	---	---
Social Science	652	471	139	222	333
Technology	---	---	---	---	---
Interdisciplinary Studies	---	231	---	---	---
Not Reported by Discipline	---	---	---	---	---

*Either numerator or denominator is 0.
 Source: Same as Table 1

TABLE 3-5

AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
 FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC COUNSELING
 AT FLORIDA ATLANTIC UNIVERSITY, BY DISCIPLINE AND LEVEL;
 1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling FTE Students per FTE Faculty Pos.
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	
Agriculture and Natural Resources	---	---	---	---	---
Architecture & Environmental Design	---	---	---	---	---
Area Studies	---	---	---	---	---
Biological Studies	---	346	89	---	212
Business and Management	---	360	209	---	289
Communications	---	---	---	---	---
Computer and Information Science	---	341	80	---	470
Education	---	361	184	---	291
Engineering	---	223	32	---	199
Fine and Applied Arts	---	137	40	---	370
Foreign Languages	---	229	37	---	544
Health Professions	---	---	---	---	*
Home Economics	---	---	---	---	---
Law	---	---	---	---	---
Letters	---	400	116	---	396
Library Science	---	---	---	---	---
Mathematics	---	307	34	---	211
Physical Science	---	140	39	---	258
Psychology	---	342	105	---	622
Public Affairs and Services	---	987	320	---	671
Social Science	---	250	88	---	228
Technology	---	---	---	---	---
Interdisciplinary Studies	---	---	---	---	---
Not Reported by Discipline	---	---	---	---	---

*Either numerator or denominator is 0.

Source: Same as Table 1.

TABLE 3-6
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC COUNSELING
AT THE UNIVERSITY OF WEST FLORIDA, BY DISCIPLINE AND LEVEL
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling FTE Students per FTE Faculty Pos.
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos.				
Agriculture and Natural Resources	---	---	---	---	---
Architecture & Environmental Design	---	---	---	---	---
Area Studies	---	---	---	---	---
Biological Studies	---	366	59	---	210
Business and Management	---	456	134	---	400
Communications	---	358	140	---	303
Computer and Information Science	---	340	211	---	288
Education	---	307	103	---	254
Engineering	---	---	---	---	---
Fine and Applied Arts	---	204	---	---	159
Foreign Languages	---	113	---	---	80
Health Professions	---	---	---	---	---
Home Economics	---	---	---	---	---
Law	---	---	---	---	---
Letters	---	246	93	---	190
Library Science	---	---	---	---	---
Mathematics	---	314	114	---	260
Physical Science	---	181	113	---	107
Psychology	---	450	109	---	366
Public Affairs and Services	---	232	---	---	538
Social Science	---	333	133	---	227
Technology	---	---	---	---	---
Interdisciplinary Studies	---	272	---	---	---
Not Reported by Discipline	---	---	---	---	---

*Either numerator or denominator is 0.

Source: Same as Table 1.

TABLE 3-7
AVERAGE PRODUCTIVITY PER QUARTER PER FULL- TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC COUNSELING
AT FLORIDA TECHNOLOGICAL UNIVERSITY BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling FTE Students per FTE Faculty Pos.
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	
Agriculture and Natural Resources	---	---	---	---	---
Architecture & Environmental Design	---	---	---	---	---
Area Studies	---	---	---	---	---
Biological Studies	476	267	100	---	122
Business and Management	516	440	201	---	205
Communications	428	332	406	---	1,787
Computer and Information Science	2,152	1,437	361	---	2,263
Education	486	501	153	---	214
Engineering	540	385	70	---	296
Fine and Applied Arts	213	211	21	---	242
Foreign Languages	272	226	---	---	248
Health Professions	---	254	17	---	173
Home Economics	---	---	---	---	---
Law	---	---	---	---	---
Letters	734	561	158	---	845
Library Science	---	---	---	---	---
Mathematics	430	306	30	---	585
Physical Science	486	229	---	---	342
Psychology	925	512	155	---	525
Public Affairs and Services	---	6,379	---	---	5,812
Social Science	478	237	97	---	126
Technology	---	---	---	---	---
Interdisciplinary Studies	---	---	---	---	---
Not Reported by Discipline	---	---	---	---	---

* Either numerator or denominator is 0.

Source: Same as Table 1.

TABLE 3-8
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC COUNSELING
AT FLORIDA INTERNATIONAL UNIVERSITY, BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				FTE Students per FTE Faculty Position
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	
Agriculture and Natural Resources	---	---	---	---	---
Architecture & Environmental Design	---	---	---	---	---
Area Studies	---	---	---	---	---
Biological Studies	---	342	---	---	244
Business and Management	---	618	237	---	284
Communications	---	---	---	---	---
Computer and Information Science	---	---	---	---	---
Education	442	187	---	---	266
Engineering	---	---	---	---	---
Fine and Applied Arts	272	110	---	---	257
Foreign Languages	314	---	---	---	208
Health Professions	241	64	---	---	93
Home Economics	264	74	---	---	214
Law	---	---	---	---	---
Letters	352	33	---	---	208
Library Science	---	---	---	---	---
Mathematics	346	187	---	---	337
Physical Science	297	---	---	---	342
Psychology	581	120	---	---	331
Public Affairs and Services	626	19	---	---	214
Social Science	380	248	---	---	219
Technology	291	13	---	---	203
Interdisciplinary Studies	59	---	---	---	2
Not Reported by Discipline	---	---	---	---	---

*Either numerator or denominator is 0.
 Source: Same as Table 1.

TABLE 3-9
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION AND ACADEMIC COUNSELING
AT THE UNIVERSITY OF NORTH FLORIDA, BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling FTE Students per FTE Faculty Pos.
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	Student Credit Hours per FTE Faculty Pos.	
Agriculture and Natural Resources	—	—	—	—	—
Architecture & Environmental Design	—	—	—	—	—
Area Studies	—	—	—	—	—
Biological Studies	—	—	—	—	—
Business and Management	360	236	—	—	174
Communications	—	—	—	—	—
Computer and Information Science	—	—	—	—	—
Education	506	132	—	—	211
Engineering	—	—	—	—	—
Fine and Applied Arts	258	—	—	—	264
Foreign Languages	—	—	—	—	—
Health Professions	—	—	—	—	—
Home Economics	—	—	—	—	—
Law	—	—	—	—	—
Letters	387	254	—	—	283
Library Science	—	—	—	—	—
Mathematics	365	—	—	—	307
Physical Science	286	—	—	—	256
Psychology	564	238	—	—	202
Public Affairs and Services	—	—	—	—	—
Social Science	428	78	—	—	173
Technology	—	—	—	—	—
Interdisciplinary Studies	280	—	—	—	—
Not Reported by Discipline	—	—	—	—	—

*Either numerator or denominator is 0.

Source: Same as Table 1.

TABLE 6-1
 ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
 EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
 AT THE UNIVERSITY OF FLORIDA
 BY SPECIFIED DISCIPLINE AND LEVEL,
 1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTRUCTION	
	Upper Level Student Credit Hours per FTE Faculty Position	Beginning Graduate Student Credit Hours per FTE Faculty Position
BIOLOGICAL STUDIES	314	219
BUSINESS AND MANAGEMENT	603	181
EDUCATION	307	231
FINE AND APPLIED ARTS	169	99
LETTERS	360	175
MATHEMATICS	420	164
PHYSICAL SCIENCE	270	127
PSYCHOLOGY	607	162
SOCIAL SCIENCE	381	186

*See Footnote to Table 5.

Source: Same as Table 1.

TABLE 6-2
ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
AT FLORIDA STATE UNIVERSITY
BY SPECIFIED DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTRUCTION	
	Upper Level Student Credit Hours per FTE Faculty Position	Beginning Graduate Student Credit Hours per FTE Faculty Position
BIOLOGICAL STUDIES	168	110
BUSINESS AND MANAGEMENT	525	284
EDUCATION	394	223
FINE AND APPLIED ARTS	319	199
LETTERS	368	202
MATHEMATICS	252	128
PHYSICAL SCIENCE	196	160
PSYCHOLOGY	779	162
SOCIAL SCIENCE	419	171

*See Footnote to Table 5.

Source: Same as Table 1.

TABLE 6-3
ADJUSTED ENROLLAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
AT FLORIDA A & M UNIVERSITY
BY SPECIFIED DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTRUCTION	
	Upper Level Student Credit Hours per FTE Faculty Position	Beginning Graduate Student Credit Hours per FTE Faculty Position
BIOLOGICAL STUDIES	425	—
BUSINESS AND MANAGEMENT	475	—
EDUCATION	287	340
FINE AND APPLIED ARTS	94	—
LETTERS	130	24
MATHEMATICS	29	—
PHYSICAL SCIENCE	234	—
PSYCHOLOGY	374	204
SOCIAL SCIENCE	324	75

*See Footnote to Table 5.

Source: Same as Table 1.

TABLE 6-4
 ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
 EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
 AT THE UNIVERSITY OF SOUTH FLORIDA
 BY SPECIFIED DISCIPLINE AND LEVEL,
 1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTRUCTION	
	Upper Level Student Credit Hours per FTE Faculty Position	Beginning Graduate Student Credit Hours per FTE Faculty Position
BIOLOGICAL STUDIES	428	134
BUSINESS AND MANAGEMENT	408	160
EDUCATION	324	277
FINE AND APPLIED ARTS	259	132
LETTERS	422	138
MATHEMATICS	410	81
PHYSICAL SCIENCE	331	102
PSYCHOLOGY	512	131
SOCIAL SCIENCE	432	227

*See Footnote to Table 5.

Source: Same as Table 1.

TABLE 6-5
ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
AT FLORIDA ATLANTIC UNIVERSITY
BY SPECIFIED DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTRUCTION	
	Upper Level Student Credit Hours per FTE Faculty Position	Beginning Graduate Student Credit Hours per FTE Faculty Position
BIOLOGICAL STUDIES	333	160
BUSINESS AND MANAGEMENT	371	319
EDUCATION	277	407
FINE AND APPLIED ARTS	141	130
LETTERS	409	213
MATHEMATICS	330	94
PHYSICAL SCIENCE	141	111
PSYCHOLOGY	368	155
SOCIAL SCIENCE	261	123

*See Footnote to Table 5.

Source: Same as Table 1.

TABLE 6-6
ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
AT THE UNIVERSITY OF WEST FLORIDA
BY SPECIFIED DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTRUCTION	
	Upper Level Student Credit Hours per FTE Faculty Position	Beginning Graduate Student Credit Hours per FTE Faculty Position
BIOLOGICAL STUDIES	345	93
BUSINESS AND MANAGEMENT	425	240
EDUCATION	275	200
FINE AND APPLIED ARTS	204	
LETTERS	237	139
MATHEMATICS	298	159
PHYSICAL SCIENCE	172	124
PSYCHOLOGY	378	172
SOCIAL SCIENCE	316	185

*See Footnote to Table 5.

Source: Same as Table 1.

TABLE 6-7
ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
AT FLORIDA TECHNOLOGICAL UNIVERSITY
BY SPECIFIED DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTRUCTION	
	Upper Level Student Credit Hours per FTE Faculty Position	Beginning Graduate Student Credit Hours per FTE Faculty Position
BIOLOGICAL STUDIES	254	149
BUSINESS AND MANAGEMENT	418	334
EDUCATION	418	350
FINE AND APPLIED ARTS	209	63
LETTERS	549	278
MATHEMATICS	303	47
PHYSICAL SCIENCE	230	—
PSYCHOLOGY	486	198
SOCIAL SCIENCE	232	164

*See Footnote to Table 5.

Source: Same as Table 1.

TABLE 6-8
ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
AT FLORIDA INTERNATIONAL UNIVERSITY
BY SPECIFIED DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTRUCTION	
	Upper Level Student Credit Hours per FTE Faculty Position	Beginning Graduate Student Credit Hours per FTE Faculty Position
BIOLOGICAL STUDIES	325	—
BUSINESS AND MANAGEMENT	552	280
EDUCATION	345	392
FINE AND APPLIED ARTS	258	767
LETTERS	323	467
MATHEMATICS	251	1,433
PHYSICAL SCIENCE	292	—
PSYCHOLOGY	564	975
SOCIAL SCIENCE	376	435

*See Footnote to Table 5.

Source: Same as Table 1.

TABLE 6-9
ADJUSTED AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME
EQUIVALENT FACULTY POSITION COMMITTED TO INSTRUCTION
AT THE UNIVERSITY OF NORTH FLORIDA
BY SPECIFIED DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR*

DISCIPLINE	INSTRUCTION	
	Upper Level Student Credit Hours per FTE Faculty Position	Beginning Graduate Student Credit Hours per FTE Faculty Position
BIOLOGICAL STUDIES		
BUSINESS AND MANAGEMENT	310	391
EDUCATION	385	282
FINE AND APPLIED ARTS	258	
LETTERS	349	463
MATHEMATICS	365	
PHYSICAL SCIENCE	286	
PSYCHOLOGY	527	307
SOCIAL SCIENCE	419	221

*See Footnote to Table 5.

Source: Same as Table 1.

TABLE 7-1
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION
AT THE UNIVERSITY OF FLORIDA, BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction			
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate
	Student Credit Hours per FTE Faculty Pos.			
Agriculture and Natural Resources	---	56	---	---
Architecture and Environmental Design	292	246	---	---
Area Studies	800	245	---	---
Biological Studies	491	314	---	---
Business and Management	644	538	---	---
Communications	597	310	---	---
Computer and Information Science	---	476	---	---
Education	261	319	---	---
Engineering	202	174	---	---
Fine and Applied Arts	199	171	---	---
Foreign Languages	379	141	---	---
Health Professions	---	---	---	---
Home Economics	---	---	---	---
Law	---	---	---	---
Letters	421	368	---	---
Library Science	---	---	---	---
Mathematics	488	387	---	---
Physical Science	354	256	---	---
Psychology	1,112	611	---	---
Public Affairs and Services	---	---	---	---
Social Science	536	391	---	---
Technology	---	---	---	---
Interdisciplinary Studies	---	---	---	---
Not Reported by Discipline	---	---	---	---

Source: Same as Table 1.

TABLE 7-2
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION
AT FLORIDA A & M UNIVERSITY, BY DISCIPLINE AND LEVEL,
1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction			
	Lower Level Student Credit Hours per FTE Faculty Pos.	Upper Level Student Credit Hours per FTE Faculty Pos.	Beginning Graduate Student Credit Hours per FTE Faculty Pos.	Advanced Graduate Student Credit Hours per FTE Faculty Pos.
Agriculture and Natural Resources	20	60	511	---
Architecture & Environmental Design	---	---	---	---
Area Studies	---	---	---	---
Biological Studies	711	731	---	---
Business and Management	299	729	---	---
Communications	---	---	---	---
Computer and Information Science	---	---	---	---
Education	144	528	1,028	---
Engineering	---	---	---	---
Fine and Applied Arts	203	280	---	---
Foreign Languages	79	15	---	---
Health Professions	144	332	---	---
Home Economics	238	900	153	---
Law	---	---	---	---
Letters	468	281	64	---
Library Science	340	387	54	---
Mathematics	649	586	---	---
Physical Science	438	398	---	---
Psychology	641	763	---	---
Public Affairs and Services	---	---	---	---
Social Science	860	819	247	---
Technology	---	---	---	---
Interdisciplinary Studies	9,423	---	---	---
Not Reported by Discipline	---	---	---	---

Source: Same as Table 1.

TABLE 7-3
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION
AT THE UNIVERSITY OF SOUTH FLORIDA, BY DISCIPLINE AND LEVEL,
1973-74 ACADEMIC YEAR

DISCIPLINE	Instruction			
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate
	Student Credit Hours per FTE Faculty Pos.			
Agriculture and Natural Resources	---	---	---	---
Architecture & Environmental Design	---	---	---	---
Area Studies	---	314	---	---
Biological Studies	802	452	---	---
Business and Management	530	383	---	---
Communications	---	427	---	---
Computer and Information Science	---	---	---	---
Education	408	448	---	---
Engineering	346	390	---	---
Fine and Applied Arts	188	335	---	---
Foreign Languages	299	199	---	---
Health Professions	---	41	---	---
Home Economics	---	---	---	---
Law	---	---	---	---
Letters	511	454	---	---
Library Science	---	---	---	---
Mathematics	646	374	---	---
Physical Science	561	401	---	---
Psychology	1,280	519	---	---
Public Affairs and Services	---	---	---	---
Social Science	649	485	---	---
Technology	---	---	---	---
Interdisciplinary Studies	---	---	---	---
Not Reported by Discipline	---	---	---	---

Source: Same as Table 1.

TABLE 7-4
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION
AT THE UNIVERSITY OF WEST FLORIDA, BY DISCIPLINE AND LEVEL,
1973-74 ACADEMIC YEAR

DISCIPLINE	Instruction			
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate
	Student Credit Hours per FTE Faculty Pos.			
Agriculture and Natural Resources	---	---	---	---
Architecture & Environmental Design	---	---	---	---
Area Studies	---	---	---	---
Biological Studies	---	354	68	---
Business and Management	---	388	119	---
Communications	---	305	---	---
Computer and Information Science	---	268	181	---
Education	---	315	136	---
Engineering*	---	---	---	---
Fine and Applied Arts	---	163	---	---
Foreign Languages	---	148	---	---
Health Professions	---	---	---	---
Home Economics	---	---	---	---
Law	---	---	---	---
Letters	---	40	113	---
Library Science	---	---	---	---
Mathematics	---	277	122	---
Physical Science	---	142	124	---
Psychology	---	407	130	---
Public Affairs and Services	---	331	---	---
Social Science	---	346	124	---
Technology	---	---	---	---
Interdisciplinary Studies	---	---	---	---
Not Reported by Discipline	---	---	---	---

Source: Same as Table 1.

TABLE 7-5
AVERAGE PRODUCTIVITY PER QUARTER PER FULL-TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION
AT FLORIDA TECHNOLOGICAL UNIVERSITY, BY DISCIPLINE AND LEVEL,
1973-74 ACADEMIC YEAR

DISCIPLINE	Instruction			
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate
	Student Credit Hours per FTE Faculty Pos.			
Agriculture and Natural Resources	—	—	—	—
Architecture & Environmental Design	—	—	—	—
Area Studies	—	—	—	—
Biological Studies	430	284	70	—
Business and Management	526	428	158	—
Communications	419	345	66	—
Computer and Information Science	—	—	—	—
Education	360	510	138	—
Engineering	545	347	71	—
Fine and Applied Arts	145	188	—	—
Foreign Languages	253	176	—	—
Health Professions	337	278	—	—
Home Economics	—	—	—	—
Law	—	—	—	—
Letters	550	420	38	—
Library Science	—	—	—	—
Mathematics	395	217	11	—
Physical Science	525	216	—	—
Psychology	804	616	188	—
Public Affairs and Services	—	—	—	—
Social Science	723	326	84	—
Technology	—	—	—	—
Interdisciplinary Studies	—	—	—	—
Not Reported by Discipline	—	—	—	—

Source: Same as Table 1

TABLE 7-6
AVERAGE PRODUCTIVITY PER QUARTER PER FULL TIME EQUIVALENT
FACULTY POSITION COMMITTED TO INSTRUCTION
AT THE UNIVERSITY OF NORTH FLORIDA, BY DISCIPLINE AND LEVEL,
1973-74 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling
	Lower Level	Upper Level	Beginning Graduate	Advanced Graduate	
	Student Credit Hours per FTE Faculty Pos.	FTE Students per FTE Faculty Pos.			
Agriculture and Natural Resources	---	---	---	---	---
Architecture & Environmental Design	---	---	---	---	---
Area Studies	---	---	---	---	---
Biological Studies	---	---	---	---	---
Business and Management	---	273	194	---	---
Communications	+	---	---	---	---
Computer and Information Science	---	---	---	---	---
Education	---	463	130	---	---
Engineering	---	---	---	---	---
Fine and Applied Arts	---	291	---	---	---
Foreign Languages	+	---	---	---	---
Health Professions	---	---	---	---	---
Home Economics	---	---	---	---	---
Law	---	---	---	---	---
Letters	---	430	3,222	---	---
Library Science	---	---	---	---	---
Mathematics	---	399	---	---	---
Physical Science	---	270	---	---	---
Psychology	---	503	300	---	---
Public Affairs and Services	---	---	---	---	---
Social Science	---	413	---	---	---
Technology	---	---	---	---	---
Interdisciplinary Studies	---	---	---	---	---
Not Reported by Discipline	---	---	---	---	---

Source: Same as Table 1.

TABLE 16-1
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
 FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75*
 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE		
	LOWER	UPPER	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
0- 9	1	4.17	64	17.25	121	64.36
10-19	2	8.33	118	31.81	53	28.19
20-29	1	4.17	89	23.99	9	4.79
30-39	1	4.17	44	11.86	4	2.13
40-49	0	0.00	26	7.01	1	0.53
50-59	2	8.33	9	2.43	0	0.00
60-69	4	16.67	4	1.08	0	0.00
70-79	2	8.33	7	1.89	0	0.00
80-89	1	4.17	1	0.27	0	0.00
90-99	0	0.00	6	1.62	0	0.00
100+	10	41.67	3	0.81	0	0.00
MEAN CLASS SIZE			119.79	24.48		9.30
STANDARD DEVIATION OF CLASS SIZES			114.69	19.12		7.68

*See footnote to Table 15.
 Source: Same as Table 1.

TABLE 16-2
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE						
	LOWER	UPPER	NO. OF CLASSES		PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	
0-9	4	3.70	14	4.19	104	66	28.21			
10-19	35	32.41	151	45.21	66					
20-29	57	52.78	120	36.93	22					
30-39	2	1.86	37	11.08	10					
40-49	1	0.93	6	1.50	4					
50-59	2	1.86	2	0.60	0					
60-69	1	0.93	1	0.30	0					
70-79	1	0.93	1	0.30	0					
80-89	1	0.93	2	0.60	0					
90-99	0	0.00	0	0.00	0					
100+	4	3.70	1	0.30	0					
MEAN CLASS SIZE			26.03		21.44					11.36
STANDARD DEVIATION OF CLASS SIZES			24.82		11.36					9.84

*See footnote to Table 16.
Source: Same as Table 1.

TABLE 16-3
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75

AREA/STUDIES (NUMBER OF STUDENTS)	CLASS SIZE	LEVEL		GRADUATE	
		LOWER	UPPER	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
0-9	6	60.00	6	18	85.71
10-19	3	25.00	11	3	14.29
20-29	0	0.00	6	0	0.00
30-39	0	0.00	2	0	0.00
40-49	8.33	8.33	1	0	0.00
50-59	1	8.33	2	0	0.00
60-69	0	0.00	0	0	0.00
70-79	1	8.33	0	0	0.00
80-89	0	0.00	0	0	0.00
90-99	0	0.00	0	0	0.00
100+	0	0.00	0	0	0.00
MEAN CLASS SIZE		20.67		20.96	
STANDARD DEVIATION OF CLASS SIZES		24.16		13.28	

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-4
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE NUMBER OF STUDENTS)	LEVEL		NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER						
0- 9	46	6.95	141	18.24	119	47.79	98	39.36
10-19	54	8.16	298	38.55	21	8.43	45	1.61
20-29	226	40.18	185	23.93	27	3.49	4	1.61
30-39	83	12.54	45	5.82	22	2.85	1	0.40
40-49	112	16.92	7	1.16	7	0.91	0	0.00
50-59	19	2.87	15	1.94	4	0.52	0	0.00
60-69	9	1.36	7	0.91	20	2.59	0	0.00
70-79	11	1.66	7	0.91	124.23	11.89	124.23	11.89
80-89	7	1.06	4	0.52	27.19	9.57	27.19	9.57
90-99	6	0.76	20	2.59				
100+	50	7.55						
MEAN CLASS SIZE			42.40					
STANDARD DEVIATION OF CLASS SIZES			52.48					

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-5
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		GRADUATE	
	LOWER	UPPER	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
0-9	22	5.24	150	5.96
10-19	23	5.43	410	16.30
20-29	53	12.62	576	22.89
30-39	69	16.43	538	21.38
40-49	147	35.00	442	17.57
50-59	53	12.62	189	7.51
60-69	13	3.10	81	3.22
70-79	6	1.43	40	1.59
80-89	5	1.19	20	0.79
90-99	3	0.71	10	0.40
100+	26	6.19	60	2.38
MEAN CLASS SIZE	48.36		36.52	19.08
STANDARD DEVIATION OF CLASS SIZES	42.92		26.85	12.22

*See footnote to Table 16.
Source: Same as Table 1.

TABLE 16-6
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	GRADUATE							
0-9	18	13.24	115	16.57	37	52.11				
10-19	2	19.85	315	45.39	28	36.62				
20-29	84	47.06	145	20.89	8	11.27				
30-39	13	9.56	51	7.35	0	0.00				
40-49	3	2.21	24	3.46	0	0.00				
50-59	1	0.14	22	3.17	0	0.00				
60-69	1	0.74	4	0.58	0	0.00				
70-79	1	0.74	5	0.72	0	0.00				
80-89	2	1.47	2	0.29	0	0.00				
90-99	2	1.47	4	0.58	0	0.00				
100+	4	2.94	7	1.01	0	0.00				
MEAN CLASS SIZE		29.45		21.28		10.24				
STANDARD DEVIATION OF CLASS SIZES		35.30		20.50		7.12				

*See footnote to Table 15.

Source: Same as Table 1.

TABLE 16-7
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
 FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
 ACADEMIC YEAR*

CLASS SIZE NUMBER OF STUDENTS	LEVEL			PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	LEVEL							
0-9	0	0	LOWER	0.00	32	16.93	10	33.33		
10-19	2	10.00	UPPER	52	27.51	10	33.33			
20-29	2	10.00	LOWER	41	21.69	7	23.33			
30-39	6	30.00	UPPER	19	10.05	0	0.00			
40-49	7	35.00	LOWER	22	11.64	2	6.67			
50-59	3	15.00	UPPER	9	4.76	0	0.00			
60-69	0	0.00	LOWER	1	0.53	1	3.33			
70-79	0	0.00	UPPER	1	0.53	0	0.00			
80-89	0	0.00	LOWER	0	0.00	0	0.00			
90-99	0	0.00	UPPER	0	0.00	0	0.00			
100+	0	0.00	LOWER	12	6.36	0	0.00			
			MEAN CLASS SIZE	38.75		31.95		17.63		
			STANDARD DEVIATION OF CLASS SIZES	11.80		36.99		13.27		

*See footnote to Table 16.
 Source: Same as Table 1.

TABLE 16-8
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
 FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	UPPER NO. OF CLASSES		
0-9	126	10.10	416	13.27	28.83
10-19	267	21.57	877	27.97	32.63
20-29	426	34.41	875	27.90	21.34
30-39	292	23.59	605	19.29	24.00
40-49	101	8.16	242	7.72	10.74
50-59	19	1.58	63	2.01	4.30
60-69	2	0.16	29	0.64	25
70-79	5	0.40	11	0.35	1.12
80-89	1	0.08	4	0.13	0.40
90-99	0	0.00	1	0.03	0.09
100+	0	0.00	22	0.70	0.00
MEAN CLASS SIZE		24.94		24.29	18.11
STANDARD DEVIATION OF CLASS SIZES		11.96		15.79	13.19

*See Footnote to Table 15.
 Source: Same as Table 1.

TABLE 16-9
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE				
	LOWER	UPPER	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY					
0-9	10	7.52	281	23.28	403	64.17		
10-19	32	24.06	443	36.70	171	27.23		
20-29	43	32.33	225	18.64	32	5.10		
30-39	18	13.53	112	9.28	11	1.75		
40-49	4	3.01	58	4.81	7	1.11		
50-59	9	6.77	27	2.24	2	0.32		
60-69	1	0.75	15	1.24	1	0.16		
70-79	3	2.26	11	0.91	1	0.16		
80-89	1	0.76	9	0.75	0	0.00		
90-99	6	4.51	8	0.66	0	0.00		
100+	6	4.51	18	1.49	0	0.00		
MEAN CLASS SIZE		34.13		22.33		9.31		
STANDARD DEVIATION OF CLASS SIZES		29.90		21.92		8.58		

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-10
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE			
	LOWER	UPPER	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY		NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	
0-9	368	35.66	907	44.44	453	82.21	
10-19	275	26.65	624	30.57	75	13.61	
20-29	230	22.29	282	13.82	20	3.63	
30-39	86	8.33	114	5.59	2	0.36	
40-49	20	1.94	49	2.40	0	0.00	
50-59	6	0.58	30	1.47	0	0.00	
60-69	9	0.87	9	0.44	0	0.00	
70-79	7	0.68	7	0.34	0	0.00	
80-89	6	0.58	4	0.20	1	0.18	
90-99	5	0.48	1	0.05	0	0.00	
100+	20	1.94	14	0.69	0	0.00	
MEAN CLASS SIZE		19.58		14.84		5.48	
STANDARD DEVIATION OF CLASS SIZES		25.29		18.56		6.49	

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-11
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
 FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
 FOREIGN LANGUAGES ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		GRADUATE	
	LOWER	UPPER	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
0-9	111	14.72	201	40.85
10-19	251	33.29	220	44.72
20-29	240	31.83	57	11.59
30-39	137	18.17	9	1.83
40-49	13	1.72	2	0.41
50-59	1	0.13	2	0.41
60-69	1	0.13	1	0.20
70-79	0	0.00	0	0.00
80-89	0	0.00	0	0.00
90-99	0	0.00	0	0.00
100+	0	0.00	0	0.00
MEAN CLASS SIZE	20.59		11.76	6.25
STANDARD DEVIATION OF CLASS SIZES	9.83		7.99	4.56

* See footnote to Table 15.
 Source: Same as Table 1.

TABLE 16-12
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

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HEALTH PROFESSIONS

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	GRADUATE						
0- 9	4	9.09		134		20.78		225	54.74
10-19	5	11.36		219		33.95		71	17.27
20-29	9	20.45		122		18.91		35	8.52
30-39	7	15.91		81		12.56		27	6.57
40-49	4	9.09		18		2.79		7	1.70
50-59	3	6.82		19		2.95		0	0.00
60-69		2.27		17		2.64		7	1.70
70-79	3	6.82		13		2.02		14	3.41
80-89	1	2.27		8		1.24		12	2.92
90-99	0	0.00		3		0.47		2	0.49
100+	7	15.91		11		1.71		11	2.68
MEAN CLASS SIZE		48.82				24.11			19.02
STANDARD DEVIATION OF CLASS SIZES		40.32				21.64			26.31

*See footnote to Table 15.
Source: Same as Table 4.

TABLE 16-13
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER								
HOME ECONOMICS	0-9	7	6.73		31	11.23	17		26.88	
	10-19	22	21.15		77	27.90	34		53.97	
	20-29	39	37.50		69	25.00	5		7.94	
	30-39	11	10.58		37	13.41	5		7.94	
	40-49	13	12.50		41	14.86	2		3.17	
	50-59	8	7.69		10	3.62	0		0.00	
	60-69	4	3.86		3	1.09	0		0.00	
	70-79	0	0.00		4	1.45	0		0.00	
	80-89	0	0.00		1	0.36	0		0.00	
	90-99	0	0.00		1	0.36	0		0.00	
	100+	0	0.00		2	0.72	0		0.00	
	MEAN CLASS SIZE		28.20		27.45				14.95	
	STANDARD DEVIATION OF CLASS SIZES		15.14		20.14				9.67	

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-14
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	GRADUATE							
0- 9	0	0.00	0	0.00	0	0.00	37	10.28	0	0.00
10-19	0	0.00	0	0.00	0	0.00	85	18.06	21	1.14
20-29	0	0.00	0	0.00	0	0.00	76	7.22	26	6.67
30-39	0	0.00	0	0.00	0	0.00	24	3.06	11	3.06
40-49	0	0.00	0	0.00	0	0.00	11	3.06	11	3.06
50-59	0	0.00	0	0.00	0	0.00	15	4.17	14	3.89
60-69	0	0.00	0	0.00	0	0.00	32	8.89	32	8.89
70-79	0	0.00	0	0.00	0	0.00	49	13.61	49	13.61
80-89	0	0.00	0	0.00	0	0.00	0.00	0.00	0.00	0.00
90-99	0	0.00	0	0.00	0	0.00	0.00	0.00	0.00	0.00
100+	0	0.00	0	0.00	0	0.00	0.00	0.00	0.00	0.00
MEAN CLASS SIZE				0.00		0.00		0.00		48.40
STANDARD DEVIATION OF CLASS SIZES				0.00		0.00		0.00		39.23

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-15
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

LETTERS	CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
		LOWER	UPPER								
0- 9	87	4.26		254		15.63		250		58.82	
10-19	363	17.76		529		32.55		143		33.65	
20-29	837	40.95		466		28.68		21		4.94	
30-39	504	24.66		221		13.60		10		2.35	
40-49	123	6.02		91		5.60		1		0.24	
50-59	30	1.47		29		1.78		0		0.00	
60-69	16	0.78		6		0.37		0		0.00	
70-79	12	0.59		7		0.43		0		0.00	
80-89	10	0.48		3		0.18		0		0.00	
90-99	1	0.05		0		0.25		0		0.00	
100+	61	2.98		15		0.92		0		0.00	
MEAN CLASS SIZE				32.86		23.89				9.60	
STANDARD DEVIATION OF CLASS SIZES				40.71		30.28				6.92	

*See footnote to Table 15.

Source: Same as Table 1.

TABLE 16-16
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

LIBRARY SCIENCE	CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		NO OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
		LOWER	UPPER						
	0- 9	0	0.00			20	43.48	6	5.56
	10-19	1	16.67			11	23.91	38	42.22
	20-29	2	33.33			8	17.39	24	26.67
	30-39	1	16.67			6	10.87	11	12.22
	40-49	0	0.00			2	4.35	8	8.89
	50-59	0	0.00			0	0.00	2	2.22
	60-69	0	0.00			0	0.00	0	0.00
	70-79	0	0.00			0	0.00	2	2.22
	80-89	0	0.00			0	0.00	0	0.00
	90-99	1	16.67			0	0.00	0	0.00
	100+	1	16.67			0	0.00	0	0.00
	MEAN CLASS SIZE		55.67			15.50			23.87
	STANDARD DEVIATION OF CLASS SIZES		51.68			11.93			13.87

*See footnote to Table 15.
Source: Same as Table 15.

TABLE 16-17
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		LEVEL		GRADUATE		
	LOWER	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	UPPER	NO. OF CLASSES ^b	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
0- 9	50	6.44	164	164	16.21	266	66.84
10-19	74	9.54	265	265	23.65	82	21.41
20-29	138	17.78	221	221	20.50	30	7.83
30-39	216	27.84	196	196	18.18	11	2.87
40-49	211	27.19	176	176	16.33	2	0.52
50-59	64	8.26	36	36	3.34	1	0.26
60-69	5	0.64	10	10	0.93	1	0.26
70-79	0	0.00	0	0	0.00	0	0.00
80-89	0	0.00	1	1	0.09	0	0.00
90-99	1	0.13	2	2	0.19	0	0.00
100+	17	2.19	17	17	1.58	0	0.00
MEAN CLASS SIZE			37.11		27.48		9.42 ^a
STANDARD DEVIATION OF CLASS SIZES			36.43		20.47		8.77

*See footnote to Table 16
Source: Same as Table 1.

TABLE 16-18
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
PHYSICAL SCIENCE

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	NO OF CLASSES	
0- 9	203	12.39	423	30.92
10-19	307	18.73	459	33.55
20-29	512	31.24	255	18.64
30-39	190	11.59	97	7.09
40-49	106	6.47	40	2.92
50-59	65	3.97	19	1.39
60-69	32	1.95	14	1.02
70-79	21	1.28	14	1.02
80-89	18	1.10	5	0.37
90-99	22	1.34	10	0.73
100+	163	9.95	32	2.34
MEAN CLASS SIZE		40.38		21.00
STANDARD DEVIATION OF CLASS SIZES		47.39		25.21
				9.00
				8.32

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-19
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LOWER		UPPER		NO OF CLASSES IN THIS CLASS SIZE CATEGORY	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO OF CLASSES IN THIS CLASS SIZE CATEGORY	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO OF CLASSES IN THIS CLASS SIZE CATEGORY	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	GRADUATE
	NO OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY							
0- 9	14	8.59			106		14 93		148		41 46
10-19	24	14.72			149		20 99		140		39 27
20-29	29	17.79			105		14.79		39		10 92
30-39	14	8.59			91		12.82		15		4 20
40-49	17	10.43			88		12.39		11		3.08
50-59	6	3.68			58		8.17		0		0.00
60-69	11	6.75			34		4.79		1		0.28
70-79	10	6.13			29		4.08		1		0.78
80-89	4	2.45			10		1.41		1		0.28
90-99	11	6.75			4		0.56		0		0.00
100+	23	14.11			36		5.07		1		0.28
MEAN CLASS SIZE		56.36					36.49				14 13
STANDARD DEVIATION OF CLASS SIZES		53.27					32.67				12 27

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-20
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
 FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		GRADUATE	
	LOWER	UPPER	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
0- 9	0	0	26	6.22
10-19	0	0	97	23.21
20-29	1	25.00	96	22.97
30-39	1	25.00	72	17.22
40-49	0	0	46	11.00
50-59	2	50.00	25	5.98
60-69	0	0	24	5.74
70-79	0	0	9	2.15
80-89	0	0	3	0.72
90-99	0	0	3	0.72
100+	0	0	17	4.07
MEAN CLASS SIZE		42.76	35.71	16.75
STANDARD DEVIATION OF CLASS SIZES		17.23	30.58	9.67

*See footnote to Table 15.
 Source: Same as Table 1.

TABLE 16-21
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
 FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	GRADUATE						
0- 9	79	6.19	360	16.97	519	64.31			
10-19	151	11.83	551	25.98	209	25.90			
20-29	230	18.03	426	20.08	50	6.20			
30-39	279	21.87	334	15.75	16	1.98			
40-49	215	16.85	243	11.46	10	1.24			
50-59	116	9.09	124	5.85	0	0.00			
60-69	62	4.86	35	1.65	1	0.12			
70-79	35	2.74	13	0.61	1	0.12			
80-89	8	0.63	7	0.33	1	0.12			
90-99	10	0.78	5	0.24	0	0.00			
100+	91	7.13	23	1.08	0	0.00			
MEAN CLASS SIZE		45.43		26.85		9.56			
STANDARD DEVIATION OF CLASS SIZES		42.34		22.25		9.00			

*See footnote to Table 15.

Source: Same as Table 1.

TABLE 16-22
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	GRADUATE							
0- 9	0	0.00			2	33.33	0		0	0.00
10-19	1	12.50			1	16.67	0		0	0.00
20-29	3	37.50			0	0.00	0		0	0.00
30-39	3	37.50			1	16.67	0		0	0.00
40-49	0	0.00			2	33.33	0		0	0.00
50-59	1	12.50			0	0.00	0		0	0.00
60-69	0	0.00			0	0.00	0		0	0.00
70-79	0	0.00			0	0.00	0		0	0.00
80-89	0	0.00			0	0.00	0		0	0.00
90-99	0	0.00			0	0.00	0		0	0.00
100+	0	0.00			0	0.00	0		0	0.00
MEAN-CLASS SIZE		28.63				24.17				0.00
STANDARD DEVIATION OF CLASS SIZES					11.01					0.00
									18.35	

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-23
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTITUTION, 1974-75
ACADEMIC YEAR*

INTERDISCIPLINARY STUDIES

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE NO. OF CLASSES PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	35.19	
0-9	16	32.65	19	3
10-19	9	18.37	13	0 0.00
20-29	6	12.24	9	0 0.00
30-39	3	6.12	5	0 0.00
40-49	2	4.08	6	0 0.00
50-59	11	22.45	0	0 0.00
60-69	2	4.08	2	0 0.00
70-79	0	0.00	0	0 0.00
80-89	0	0.00	0	0 0.00
90-99	0	0.00	0	0 0.00
100+	0	0.00	0	0 0.00
MEAN CLASS SIZE		25.88	19.59	2.67
STANDARD DEVIATION OF CLASS SIZES		20.79	16.01	1.53

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 16-24
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR THE STATE UNIVERSITY SYSTEM OF
 FLORIDA BY SPECIFIED DISCIPLINE BY LEVEL OF INSTRUCTION, 1974-75
 DISCIPLINES NOT CLASSIFIED

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER NO. OF CLASSES	UPPER NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	
0-9	76	46.34	117	39.53
10-19	54	32.93	105	35.47
20-29	23	14.02	44	14.86
30-39	4	2.44	13	4.39
40-49	2	1.22	11	3.72
50-59	0	0.00	5	1.69
60-69	1	0.61	0	0.00
70-79	1	0.61	1	0.34
80-89	0	0.00	0	0.00
90-99	2	1.22	0	0.00
100+	1	0.61	0	0.00
MEAN CLASS SIZE		13.97		14.93
STANDARD DEVIATION OF CLASS SIZES		15.69		11.71
				9.33
				13.94

*See footnote to Table 15.
 Source: Same as Table 1.

TABLE 17-1
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE UNIVERSITY OF FLORIDA
FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION,
1974-75 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	GRADUATE						
0- 9	236	5.61	783	16.46	1281	49.19			
10-19	732	17.41	1,582	33.25	783	30.07			
20-29	1,386	32.96	999	21.00	232	8.91			
30-39	949	22.57	571	12.00	112	4.30			
40-49	418	9.94	395	8.30	43	1.65			
50-59	117	2.75	135	2.84	12	0.46			
60-69	56	1.33	75	1.58	19	0.73			
70-79	26	0.62	42	0.88	24	0.92			
80-89	24	0.57	19	0.40	22	0.84			
90-99	32	0.76	21	0.44	31	1.19			
100+	229	5.45	136	2.86	45	1.73			
TOTAL	4,205	100.00	4,758	100.00	2,804	100.00			
MEAN CLASS SIZE		37.46		26.89		16.13			
STANDARD DEVIATION OF CLASS SIZES		46.33		29.02		20.79			
MEDIAN CLASS SIZE		26		20		10			
PERCENT OF TOTAL ENROLLMENTS IN ALL CLASSES IN CLASSES WITH ENROLLMENTS OF LESS THAN 10		0.73		3.44		15.82			

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 17-2
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR FLORIDA STATE UNIVERSITY
FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION,
1974-75 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE	
	LOWER	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES
0- 9	368	13.48	1,074	24.98	1,450
10-19	549	20.11	1,167	27.15	729
20-29	360	31.14	806	18.75	297
30-39	399	14.62	481	11.19	99
40-49	228	8.35	361	8.40	42
50-59	98	3.59	152	3.54	8
60-69	40	1.47	71	1.65	4
70-79	34	1.25	53	1.23	11
80-89	11	0.40	23	0.54	8
90-99	8	0.29	14	0.33	1
100+	145	5.31	97	2.26	16
TOTAL	2,730	100.00	4,293	100.00	2,664
MEAN CLASS SIZE	33.67				100.00
STANDARD DEVIATION OF CLASS SIZES					
MEDIAN CLASS SIZE					
PERCENT OF TOTAL ENROLLMENT IN ALL CLASSES IN CLASSES WITH ENROLLMENTS OF LESS THAN 10					

*See footnotes to Table 15.
**INTERPOLATION FOR MEDIAN IS INACCURATE. VALUE OF MEDIAN < 10.
Source: Same as Table 1.

TABLE 17-3
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR FLORIDA A & M UNIVERSITY
 FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION,
 1974-75 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		GRADUATE	
	LOWER	UPPER	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
0-9	361	25.19	541	40.13
10-19	349	22.49	369	27.37
20-29	290	18.69	173	12.83
30-39	194	12.50	123	9.12
40-49	143	9.21	73	5.42
50-59	85	5.48	31	2.30
60-69	34	2.19	15	1.11
70-79	25	1.61	12	0.89
80-89	12	0.77	3	0.22
90-99	7	0.45	3	0.22
100+	22	1.42	5	0.37
TOTAL	1,552	100.00	1,348	100.00
MEAN CLASS SIZE		25.46	17.82	17.33
STANDARD DEVIATION OF CLASS SIZES		21.01	16.83	18.83
MEDIAN CLASS SIZE		21	14	12
PERCENT OF TOTAL ENROLLMENTS IN ALL CLASSES IN CLASSES WITH ENROLLMENTS OF LESS THAN 10		4.38	11.06	12.76

*See footnote to Table 15.
 Source: Same as Table 1.

TABLE 17-4
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE UNIVERSITY OF SOUTH FLORIDA
FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION,
1974-75 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER						
0- 9	194	10-32	625	18.65	579	50.39	342	29.28
10-19	290	16-18	983	29.33	122	10.62	470	4.20
20-29	523	20-19	742	22.14	49	4.20	34	2.96
30-39	309	17-24	470	14.03	10	0.87	118	1.07
40-49	264	14-73	278	8.30	2	0.17	43	0.78
50-59	83	4-63	118	3.52	0	0.00	26	0.17
60-69	29	1-62	15	0.45	0	0.00	15	0.17
70-79	18	1-00	15	0.45	0	0.00	36	0.00
80-89	12	0-67	15	0.45	0	0.00	0	0.00
90-99	9	0-50	15	0.45	0	0.00	0	0.00
100+	61	3-40	36	1.07	0	0.00	0	0.00
TOTAL	4,792	100.00	3,351	100.00	4,149	100.00		
MEAN CLASS SIZE		33.00		24.93		12.85		
STANDARD DEVIATION OF CLASS SIZES		29.08		25.84		12.42		
MEDIAN CLASS SIZE		28		21		3.75		
PERCENT OF TOTAL ENROLLMENTS IN ALL CLASSES IN CLASSES WITH ENROLLMENTS OF LESS THAN 10								1.44

*See footnote to Table 15.
**INTERPOLATION FOR MEDIAN IN INACCURATE VALUE OF MEDIAN < 10.

TABLE 17-5
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR FLORIDA ATLANTIC UNIVERSITY
FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION,
1974/75 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		GRADUATE	
	LOWER	UPPER	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
0-9	6	9	288	18.79
10-19	0	9	490	31.96
20-29	5	9	369	24.07
30-39	0	9	198	12.96
40-49	0	9	90	5.87
50-59	0	9	44	2.87
60-69	0	9	21	1.37
70-79	0	9	14	0.91
80-89	0	9	8	0.52
90-99	0	9	1	0.07
100+	0	9	0	0.00
TOTAL	0	9	1,133	100.00
MEAN CLASS SIZE			22.61	15.18
STANDARD DEVIATION OF CLASS SIZE				12.57
MEDIAN CLASS SIZE				12
PERCENT OF TOTAL ENROLLMENTS IN ALL CLASSES IN CLASSES WITH ENROLLMENTS OF LESS THAN 10				4.22
SOURCE: Same as Table 1.				14.78

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 17-6
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE UNIVERSITY OF WEST FLORIDA
FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION,
1974-75 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL		GRADUATE	
	LOWER	UPPER	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
0- 9	0	0	109	13.82
10-19	0	0	233	28.91
20-29	0	0	192	23.82
30-39	0	0	126	15.51
40-49	0	0	58	7.20
50-59	0	0	46	5.78
60-69	0	0	19	2.39
70-79	0	0	12	1.49
80-89	0	0	3	0.37
90-99	0	0	5	0.62
100+	0	0	5	0.62
TOTAL	0	0	806	100.00
MEAN CLASS SIZE	-----	-----	26.19	16.74
STANDARD DEVIATION OF CLASS SIZES	-----	-----	18.83	10.99
MEDIAN CLASS SIZE	-----	-----	23	16
PERCENT OF TOTAL ENROLLMENTS IN ALL CLASSES IN CLASSES WITH EN- ROLLMENTS OF LESS THAN 10	0.00	2.29	2.29	8.56

*See footnote to Table 18.
Source: Same as Table 1.

TABLE 17-7
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR FLORIDA TECHNOLOGICAL UNIVERSITY
 FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION,
 1974-75 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			GRADUATE			
	LOWER	UPPER	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY		NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	
0-9	110	15.97	206	11.57	227	46.80	
10-19	125	19.74	463	26.00	91	18.76	
20-29	185	25.56	516	28.87	116	23.82	
30-39	96	13.93	219	17.91	39	8.04	
40-49	55	7.98	164	9.21	12	2.47	
50-59	40	5.81	62	3.48	0	0.00	
60-69	17	2.47	16	0.90	0	0.00	
70-79	16	2.32	7	0.39	0	0.00	
80-89	7	1.02	8	0.46	0	0.00	
90-99	13	1.88	5	0.28	0	0.00	
100+	27	3.92	16	0.84	0	0.00	
TOTAL	899	100.00	1,781	100.00	485	100.00	
MEAN CLASS SIZE		33.82		26.11		14.10	
STANDARD DEVIATION OF CLASS SIZES		34.40				11.46	
MEDIAN CLASS SIZE		28		24		12	
PERCENT OF TOTAL ENROLLMENTS IN ALL CLASSES IN CLASSES WITH ENROLLMENTS OF LESS THAN 10						2.24	

*See footnote to Table 18.
 Source: Same as Table 1.

TABLE 17-8
 ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
 MEASURES OF CENTRAL TENDENCY FOR FLORIDA INTERNATIONAL UNIVERSITY
 FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION,
 1974-75 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LEVEL			PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	LOWER	UPPER	GRADUATE							
0-9	0	0.00	324	15.87	102	22.03				
10-19	0	0.00	620	30.38	143	30.39				
20-29	0	0.00	477	23.37	106	22.83				
30-39	0	0.00	303	14.86	67	14.47				
40-49	0	0.00	167	8.18	30	6.48				
50-59	0	0.00	99	4.86	8	1.73				
60-69	0	0.00	27	1.32	6	1.30				
70-79	0	0.00	12	0.59	1	0.22				
80-89	0	0.00	6	0.29	0	0.00				
90-99	0	0.00	2	0.10	0	0.00				
100+	0	0.00	4	0.20	1	0.22				
TOTAL	0	0.00	2,041	100.00	463	100.00				
MEAN CLASS SIZE										
STANDARD DEVIATION OF CLASS SIZES										
MEDIAN CLASS SIZE										
PERCENT OF TOTAL ENROLLMENT IN ALL CLASSES IN CLASSES WITH ENROLLMENTS OF LESS THAN 10										

*See footnote 10 Table 15.
 Sources: Same as Table 1.

TABLE 17-9
ADJUSTED FREQUENCY DISTRIBUTION OF CLASS SIZES AND SPECIFIED
MEASURES OF CENTRAL TENDENCY FOR THE UNIVERSITY OF NORTH FLORIDA
FOR ALL DISCIPLINES BY LEVEL OF INSTRUCTION,
1974-75 ACADEMIC YEAR*

CLASS SIZE (NUMBER OF STUDENTS)	LOWER		UPPER		LEVEL	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	GRADUATE	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY
	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY	NO. OF CLASSES	PERCENT OF TOTAL CLASSES IN THIS CLASS SIZE CATEGORY							
0-9	0	0.00	89	13.44		55					23.71
10-19	0	0.00	159	24.02		62					26.72
20-29	0	0.00	157	23.72		50					21.55
30-39	0	0.00	144	21.76		39					16.81
40-49	0	0.00	79	11.93		18					7.76
50-59	0	0.00	16	2.42		8					2.16
60-69	0	0.00	9	1.36		2					0.86
70-79	0	0.00	4	0.60		1					0.43
80-89	0	0.00	2	0.30		0					0.00
90-99	0	0.00	0	0.00		0					0.00
100+	0	0.00	3	0.46		0					0.00
TOTAL	9	0.00	662	100.00		232					100.00
MEAN CLASS SIZE						26.20					21.39
STANDARD DEVIATION OF CLASS SIZES											14.84
MEDIAN CLASS SIZE											10
PERCENT OF TOTAL ENROLLMENTS IN ALL CLASSES IN CLASSES WITH ENROLLMENTS OF 100 LESS THAN 10											4.50

*See footnote to Table 15.
Source: Same as Table 1.

TABLE 18-1
MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
FOR THE UNIVERSITY OF FLORIDA
BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agriculture and Natural Resources	119.79	114.80	24.79	19.12	9.12	7.47
Architecture and Environmental Design	27.21	25.33	21.01	11.26	10.98	10.07
Area Studies	8.11	3.18	14.71	12.02	11.00	1.41
Biological Studies	41.85	43.35	33.31	43.13	13.03	10.51
Business and Management	50.55	58.45	50.65	50.78	14.20	11.61
Communications	28.07	21.09	19.85	12.30	12.91	5.46
Computer & Information Science	0.00	0.00	37.67	50.95	0.00	0.00
Education	29.35	9.04	25.83	18.87	16.44	9.48
Engineering	36.00	35.83	21.46	21.28	11.65	9.56
Fine and Applied Arts	24.82	22.55	16.17	14.07	5.80	4.84
Foreign Languages	25.34	8.35	9.43	6.60	5.00	3.41
Health Professions	77.00	54.92	23.31	21.69	24.10	30.13
Home Economics	0.00	0.00	0.00	0.00	0.00	0.00
Law	0.00	0.00	0.00	0.00	52.80	39.33
Letters	34.45	51.50	24.79	28.10	8.72	5.59
Library Science	0.00	0.00	0.00	0.00	0.00	0.00
Mathematics	51.70	73.77	33.84	26.15	12.91	11.10
Physical Science	42.25	50.20	30.53	32.96	9.99	8.13
Psychology	92.64	20.85	49.82	41.06	11.90	8.63
Public Affairs and Services	0.00	0.00	84.67	94.29	0.00	0.00
Social Science	45.93	39.53	25.97	30.86	6.45	5.32
Technology	0.00	0.00	0.00	0.00	0.00	0.00
Interdisciplinary Studies	0.00	0.00	34.15	18.74	0.00	0.00
Disciplines Not Classified	0.00	0.00	0.00	0.00	0.00	0.00
All Disciplines	37.46	45.33	25.89	28.02	16.13	20.79

*See footnote to Table 15.

TABLE 18-2
MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
FOR FLORIDA STATE UNIVERSITY
BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agriculture and Natural Resources	0.00	0.00	0.00	0.00	0.00	0.00
Architecture and Environmental Design	13.86	15.19	24.04	11.50	11.78	9.65
Area Studies	0.00	0.00	43.50	14.27	3.00	2.96
Biological Studies	45.53	88.83	22.05	23.58	9.07	8.36
Business and Management	37.94	13.02	37.33	24.20	17.02	9.65
Communications	31.25	60.43	25.07	38.02	7.60	6.32
Computer & Information Science	0.00	0.00	0.00	0.00	0.00	0.00
Education	21.19	11.99	24.10	16.85	14.05	10.83
Engineering	0.00	0.00	0.00	0.00	0.00	0.00
Fine and Applied Arts	23.80	32.61	13.40	17.42	5.59	5.91
Foreign Languages	18.54	10.12	9.14	6.72	6.83	5.24
Health Professions	0.00	0.00	34.81	28.66	20.50	14.71
Home Economics	34.82	13.62	31.02	21.37	17.12	10.35
Law	0.00	0.00	0.00	0.00	40.41	37.89
Letters	29.28	20.30	21.21	18.18	8.44	6.52
Library Science	90.00	55.56	21.19	10.40	24.38	13.82
Mathematics	34.07	12.74	18.11	14.87	7.85	7.20
Physical Science	44.91	65.42	17.74	27.42	6.83	10.05
Psychology	84.47	58.10	40.77	44.95	15.87	17.43
Public Affairs and Services	0.00	0.00	38.81	32.79	16.86	9.91
Social Science	51.87	54.74	30.47	27.64	8.63	6.87
Technology	0.00	0.00	0.00	0.00	0.00	0.00
Interdisciplinary Studies	8.54	4.88	0.00	0.00	0.00	0.00
Disciplines Not Classified	17.44	11.56	0.00	0.00	0.00	0.00
All Disciplines	33.67	40.82	24.86	25.51	12.28	14.62

*See footnote to Table 15.

TABLE 18-3
MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
FOR FLORIDA A & M UNIVERSITY
BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agriculture and Natural Resources	0.00	0.00	5.83	3.25	13.25	9.38
Architecture and Environmental Design	10.00	0.00	8.50	0.71	0.00	0.00
Area Studies	0.00	0.00	0.00	0.00	0.00	0.00
Biological Studies	53.35	35.76	10.47	7.87	1.00	0.00
Business and Management	56.18	17.23	34.60	20.12	0.00	0.00
Communications	20.38	14.32	4.58	3.04	0.00	0.00
Computer & Information Science	0.00	0.00	0.00	0.00	0.00	0.00
Education	19.95	14.32	17.18	11.42	20.37	17.34
Engineering	0.00	0.00	0.00	0.00	0.00	0.00
Fine and Applied Arts	7.96	11.23	8.09	7.33	0.00	0.00
Foreign Languages	13.04	5.36	2.77	1.24	0.00	0.00
Health Professions	38.42	29.63	26.60	24.41	34.53	32.76
Home Economics	18.81	11.96	21.08	15.93	5.70	3.13
Law	0.00	0.00	0.00	0.00	0.00	0.00
Letters	26.55	14.01	12.07	11.40	2.50	1.73
Library Science	21.33	7.37	3.73	2.37	9.00	1.00
Mathematics	30.67	15.58	6.00	3.08	4.82	1.08
Physical Science	41.44	33.88	20.21	24.41	0.00	0.00
Psychology	40.71	22.74	28.64	18.22	12.38	7.15
Public Affairs and Services	0.00	0.00	0.00	0.00	0.00	0.00
Social Science	35.05	19.28	21.77	14.74	5.21	3.37
Technology	28.63	11.04	24.17	18.35	0.00	0.00
Interdisciplinary Studies	37.47	18.50	8.33	0.58	0.00	0.00
Disciplines Not Classified	13.77	15.90	9.96	10.46	0.00	0.00
All Disciplines	25.48	21.91	17.82	16.83	17.33	18.13

*See footnote to Table 15.

TABLE 18-4
MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
FOR THE UNIVERSITY OF SOUTH FLORIDA
BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agriculture and Natural Resources	0.00	0.00	0.00	0.00	0.00	0.00
Architecture and Environmental Design	0.00	0.00	0.00	0.00	0.00	0.00
Area Studies	58.33	18.23	18.06	6.67	0.00	0.00
Biological Studies	39.82	35.24	26.08	27.03	13.45	10.02
Business and Management	51.60	35.36	33.00	18.87	14.28	10.71
Communications	0.00	0.00	21.48	17.30	0.00	0.00
Computer & Information Science	0.00	0.00	0.00	0.00	0.00	0.00
Education	23.43	9.91	23.18	12.24	18.25	13.90
Engineering	24.00	22.00	22.12	21.24	9.56	6.73
Fine and Applied Arts	20.38	13.94	19.82	31.39	6.10	10.21
Foreign Languages	18.60	8.87	12.22	5.58	7.94	3.11
Health Professions	0.00	0.00	29.18	20.85	6.30	13.71
Home Economics	0.00	0.00	0.00	0.00	0.00	0.00
Law	0.00	0.00	0.00	0.00	0.00	0.00
Letters	34.14	26.79	29.72	52.07	11.23	5.99
Library Science	0.00	0.00	0.00	0.00	0.00	0.00
Mathematics	34.41	11.34	27.09	12.91	9.43	4.16
Physical Science	31.52	33.65	22.40	24.98	8.96	7.18
Psychology	33.04	53.14	25.81	21.54	11.31	7.68
Public Affairs and Services	0.00	0.00	0.00	0.00	0.00	0.00
Social Science	39.52	29.61	25.37	17.07	15.09	13.00
Technology	0.00	0.00	0.00	0.00	0.00	0.00
Interdisciplinary Studies	0.00	0.00	9.00	4.30	0.00	0.00
Disciplines Not Classified	0.00	0.00	0.00	0.00	0.00	0.00
All Disciplines	33.00	29.08	24.93	25.84	12.85	12.42

*See footnote to Table 15.

TABLE 18-5
MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
FOR FLORIDA ATLANTIC UNIVERSITY
BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agriculture and Natural Resources	0.00	0.00	0.00	0.00	0.00	0.00
Architecture and Environmental Design	0.00	0.00	0.00	0.00	0.00	0.00
Area Studies	0.00	0.00	0.00	0.00	0.00	0.00
Biological Studies	0.00	0.00	22.30	14.38	11.92	9.30
Business and Management	0.00	0.00	28.72	17.36	16.94	11.45
Communications	0.00	0.00	0.00	0.00	0.00	0.00
Computer & Information Science	0.00	0.00	29.78	19.46	9.67	0.58
Education	0.00	0.00	20.55	16.00	18.60	13.88
Engineering	0.00	0.00	19.72	11.40	5.25	2.49
Fine and Applied Arts	0.00	0.00	16.74	12.16	4.83	1.94
Foreign Languages	0.00	0.00	18.47	12.86	0.00	0.00
Health Professions	0.00	0.00	13.50	5.78	0.00	0.00
Home Economics	0.00	0.00	0.00	0.00	0.00	0.00
Law	0.00	0.00	0.00	0.00	0.00	0.00
Letters	0.00	0.00	17.67	9.39	8.94	8.62
Library Science	0.00	0.00	0.00	0.00	0.00	0.00
Mathematics	0.00	0.00	24.71	14.47	6.88	4.77
Physical Science	0.00	0.00	18.88	11.45	5.86	3.99
Psychology	0.00	0.00	45.03	28.19	10.63	3.78
Public Affairs and Services	0.00	0.00	35.68	24.82	16.27	8.97
Social Science	0.00	0.00	26.99	20.18	7.54	4.75
Technology	0.00	0.00	0.00	0.00	0.00	0.00
Interdisciplinary Studies	0.00	0.00	0.00	0.00	0.00	0.00
Disciplines Not Classified	0.00	0.00	0.00	0.00	0.00	0.00
All Disciplines	0.00	0.00	22.61	16.79	15.18	12.57

*See footnote to Table 15.

TABLE 18-6

MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
 FOR THE UNIVERSITY OF WEST FLORIDA
 BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agriculture and Natural Resources	0.00	0.00	0.00	0.00	0.00	0.00
Architecture and Environmental Design	0.00	0.00	0.00	0.00	0.00	0.00
Area Studies	0.00	0.00	0.00	0.00	0.00	0.00
Biological Studies	0.00	0.00	33.56	19.66	11.38	3.64
Business and Management	0.00	0.00	36.33	25.39	19.51	11.01
Communications	0.00	0.00	27.92	14.61	22.33	5.51
Computer & Information Science	0.00	0.00	22.72	14.82	34.40	22.86
Education	0.00	0.00	26.04	14.24	17.71	10.30
Engineering	0.00	0.00	12.50	10.06	0.00	0.00
Fine and Applied Arts	0.00	0.00	15.53	12.53	0.00	0.00
Foreign Languages	0.00	0.00	7.52	6.85	0.00	0.00
Health Professions	0.00	0.00	0.00	0.00	0.00	0.00
Home Economics	0.00	0.00	0.00	0.00	0.00	0.00
Law	0.00	0.00	0.00	0.00	0.00	0.00
Letters	0.00	0.00	22.25	7.80	11.38	5.34
Library Science	0.00	0.00	0.00	0.00	0.00	0.00
Mathematics	0.00	0.00	30.90	23.13	13.00	10.68
Physical Science	0.00	0.00	19.09	20.46	13.54	7.96
Psychology	0.00	0.00	32.26	21.39	16.32	14.14
Public Affairs and Services	0.00	0.00	25.00	13.15	0.00	0.00
Social Science	0.00	0.00	29.14	16.01	17.26	7.53
Technology	0.00	0.00	0.00	0.00	0.00	0.00
Interdisciplinary Studies	0.00	0.00	0.00	0.00	0.00	0.00
Disciplines Not Classified	0.00	0.00	6.50	7.78	0.00	0.00
All Disciplines	0.00	0.00	26.19	18.83	16.74	10.89

*See footnote to Table 15.

TABLE 18-7
MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
FOR FLORIDA TECHNOLOGICAL UNIVERSITY
BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agriculture and Natural Resources	0.00	0.00	0.00	0.00	0.00	0.00
Architecture and Environmental Design	0.00	0.00	0.00	0.00	0.00	0.00
Area Studies	0.00	0.00	0.00	0.00	0.00	0.00
Biological Studies	33.83	50.32	24.48	15.73	11.07	7.10
Business and Management	46.61	29.34	30.61	24.91	22.83	9.33
Communications	31.94	26.24	21.89	12.54	8.65	7.42
Computer & Information Science	38.75	11.80	28.38	14.32	15.57	7.25
Education	26.56	14.04	28.44	13.90	23.54	9.67
Engineering	40.13	26.77	27.56	28.47	4.24	3.99
Fine and Applied Arts	15.35	16.76	13.31	12.19	4.78	4.32
Foreign Languages	18.92	9.50	16.67	5.51	0.00	0.00
Health Professions	0.00	0.00	17.98	10.44	13.83	11.65
Home Economics	0.00	0.00	0.00	0.00	0.00	0.00
Law	0.00	0.00	0.00	0.00	0.00	0.00
Letters	42.51	47.22	25.66	11.15	10.95	6.85
Library Science	0.00	0.00	0.00	0.00	0.00	0.00
Mathematics	36.67	23.18	27.45	15.89	5.67	3.16
Physical Science	36.84	37.34	21.05	19.11	0.00	0.00
Psychology	58.04	41.07	34.98	16.04	18.32	11.42
Public Affairs and Services	42.75	17.23	36.45	16.53	0.00	0.00
Social Science	52.25	46.45	27.98	14.04	20.80	7.75
Technology	0.00	0.00	0.00	0.00	0.00	0.00
Interdisciplinary Studies	5.50	2.95	22.17	5.31	2.67	1.53
Discipline Not Classified	0.00	0.00	0.00	0.00	0.00	0.00
All Disciplines	33.62	34.40	26.11	18.80	14.10	11.46

*See footnote to Table 15.

TABLE 18:8

MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
 FOR FLORIDA INTERNATIONAL UNIVERSITY
 BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agriculture and Natural Resources	0.00	0.00	0.00	0.00	0.00	0.00
Architecture and Environmental Design	0.00	0.00	0.00	0.00	0.00	0.00
Area Studies	0.00	0.00	0.00	0.00	0.00	0.00
Biological Studies	0.00	0.00	19.21	17.54	8.20	10.57
Business and Management	0.00	0.00	35.23	17.52	23.02	11.61
Communications	0.00	0.00	0.00	0.00	0.00	0.00
Computer & Information Science	0.00	0.00	0.00	0.00	0.00	0.00
Education	0.00	0.00	29.41	13.75	25.06	15.91
Engineering	0.00	0.00	0.00	0.00	0.00	0.00
Fine and Applied Arts	0.00	0.00	13.08	7.61	3.05	3.70
Foreign Languages	0.00	0.00	15.54	5.42	0.00	0.00
Health Professions	0.00	0.00	17.36	11.70	15.45	14.05
Home Economics	0.00	0.00	15.78	8.29	14.90	4.01
Law	0.00	0.00	0.00	0.00	0.00	0.00
Letters	0.00	0.00	24.14	12.76	18.82	10.10
Library Science	0.00	0.00	0.00	0.00	0.00	0.00
Mathematics	0.00	0.00	24.19	11.03	10.25	0.96
Physical Science	0.00	0.00	12.83	12.28	17.00	5.66
Psychology	0.00	0.00	30.82	20.67	18.57	11.28
Public Affairs and Services	0.00	0.00	28.44	14.00	15.20	5.07
Social Science	0.00	0.00	25.50	14.19	18.36	16.05
Technology	0.00	0.00	0.00	0.00	0.00	0.00
Interdisciplinary Studies	0.00	0.00	0.00	0.00	0.00	0.00
Disciplines Not Classified	0.00	0.00	17.46	11.56	9.33	13.94
All Disciplines	0.00	0.00	24.08	15.85	20.81	14.56

*See Footnote to Table 15.

TABLE 18-9
MEAN CLASS SIZES AND STANDARD DEVIATION OF CLASS SIZES
FOR THE UNIVERSITY OF NORTH FLORIDA
BY DISCIPLINE AND LEVEL, 1974-75 ACADEMIC YEAR*

DISCIPLINE	Level					
	Lower Level		Upper Level		Graduate	
	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes	Mean Class Size	Standard Deviation of Class Sizes
Agricultural and Natural Resources	0.00	0.00	0.00	0.00	0.00	0.00
Architecture and Environmental Design	0.00	0.00	0.00	0.00	0.00	0.00
Area Studies	0.00	0.00	0.00	0.00	0.00	0.00
Biological Studies	0.00	0.00	0.00	0.00	0.00	0.00
Business & Management	0.00	0.00	25.72	10.65	30.78	13.72
Communications	0.00	0.00	0.00	0.00	0.00	0.00
Computer & Information Science	0.00	0.00	0.00	0.00	0.00	0.00
Education	0.00	0.00	29.46	21.16	19.48	15.06
Engineering	0.00	0.00	0.00	0.00	0.00	0.00
Fine and Applied Arts	0.00	0.00	20.70	11.86	0.00	0.00
Foreign Languages	0.00	0.00	0.00	0.00	0.00	0.00
Health Professions	0.00	0.00	0.00	0.00	0.00	0.00
Home Economics	0.00	0.00	0.00	0.00	0.00	0.00
Law	0.00	0.00	0.00	0.00	0.00	0.00
Letters	0.00	0.00	21.11	11.99	25.22	7.48
Library Science	0.00	0.00	0.00	0.00	0.00	0.00
Mathematics	0.00	0.00	26.88	16.95	0.00	0.00
Physical Science	0.00	0.00	19.39	20.16	0.00	0.00
Psychology	0.00	0.00	33.53	12.36	16.52	8.76
Public Affairs and Services	0.00	0.00	0.00	0.00	0.00	0.00
Social Science	0.00	0.00	29.57	13.45	8.71	9.12
Technology	0.00	0.00	0.00	0.00	0.00	0.00
Interdisciplinary Studies	0.00	0.00	0.00	0.00	0.00	0.00
Disciplines Not Classified	0.00	0.00	0.00	0.00	0.00	0.00
All Discipline	0.00	0.00	26.30	16.18	21.39	14.64

*See footnote to Table 15
 Source: Same as Table 1.

TABLE 22.1
PERCENT DISTRIBUTION OF FULL-TIME-EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT THE UNIVERSITY OF FLORIDA BY
DISCIPLINE, 1974-75 ACADEMIC YEAR

DISCIPLINE	Percent of FTE Faculty Positions Committed to						Academic Administrative Institution (Percent)	Public Service (Percent)	Academic Administrative Institution (Percent)	Total FTE (Faculty)
	Institution		Advanced Graduate Program (Percent)		Total Instruction (Percent)					
	Lower Level (Percent)	Upper Level (Percent)	Biography Graduate (Percent)	Research (Percent)	Academic Chairmanship (Percent)					
Agriculture and Natural Resources	17.60	54.45	13.71	0.03	86.80	4.44	1.95	1.77	5.89	66.00
Architecture and Environmental Design	22.20	22.09	4.39	6.18	14.16	3.99	63.02	3.28	18.44	6.00
Area Studies	0.64	27.70	10.84	5.20	53.41	5.14	31.92	2.69	6.82	130.00
Biological Sciences	0.54	61.12	6.27	0.16	62.11	7.74	4.45	13.55	12.12	48.00
Business and Management	72.22	15.29	13.02	80.76	4.07	1.00	2.61	6.54	207.00	
Communications	13.64	37.88	12.01	63.32	4.46	20.96	1.07	10.46	178.00	
Computer and Information Sciences	2.79	33.40	16.10	6.06	86.94	1.91	2.71	8.71	84.00	
Education	36.46	42.02	5.74	6.13	78.92	3.30	14.01	0.90	2.85	81.00
Engineering	49.68	17.68	5.74	5.57	79.68	4.48	10.01	1.23	4.57	162.00
Fine and Applied Arts	12.30	51.82	6.06	8.05	82.12	1.82	13.96	0.01	2.07	88.00
Foreign Languages	24.03	6.41	5.57	6.13	79.68	4.48	10.01	1.23	4.57	
Health Professions	0.66	64.13	—	—	—	—	—	—	—	
Home Economics	—	—	—	—	—	—	—	—	—	
Law	—	—	—	—	—	—	—	—	—	
Lettres	—	—	—	—	—	—	—	—	—	
Literary Sciences	—	—	—	—	—	—	—	—	—	
Mathematics	42.09	13.81	6.06	7.28	69.24	3.22	19.17	0.81	7.64	120.00
Physical Sciences	4.27	32.77	21.86	10.97	70.69	4.61	16.31	3.61	5.76	33.00
Psychiatry	—	19.79	—	—	19.79	—	46.35	—	33.86	2.00
Public Affairs and Services	28.26	26.67	8.92	8.41	72.17	4.20	15.98	1.47	6.17	137.00
Social Sciences	—	—	—	—	—	—	—	—	—	
Technology	—	—	—	—	—	—	—	—	—	
Undergraduate Studies	44.83	—	—	—	48.83	4.28	3.06	16.38	30.47	53.00
Not Reported by Discipline	—	—	—	—	—	—	—	—	—	86.00

Sources: Same as Table I.

TABLE 22.2
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT FLORIDA STATE UNIVERSITY BY
DISCIPLINE, 1974-75 ACADEMIC YEAR

DISCIPLINE	Percent of FTE Faculty Positions Committed to									
	Instruction			Research			Public Service			Academic Administration (percent)
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Instruction (percent)	Academic Counseling (percent)	Research (percent)	Public Service (percent)	Academic Administration (percent)	Total FTE (Faculty)
Agricultural and Natural Resources	0.31	24.94	41.80	0.87	67.93	3.49	16.38	3.66	8.63	13.00
Architecture and Environmental Design	2.81	18.77	7.81	20.10	5.18	52.58	3.76	9.38	2.00	—
Arts Studies	10.61	38.11	11.14	9.34	80.99	5.71	18.13	1.49	8.06	90.00
Biological Studies	7.18	52.07	8.49	2.86	70.38	7.90	13.41	2.50	5.78	3.00
Business and Management	7.21	42.03	10.10	13.97	73.32	6.12	7.44	6.36	7.73	17.00
Communication Sciences	—	—	—	—	—	—	—	—	—	—
Computer and Information Sciences	4.71	31.68	20.39	15.97	72.73	6.58	8.65	2.11	11.01	179.00
Education	—	—	—	—	—	—	—	—	—	—
Engineering	—	—	—	—	—	—	—	—	—	—
Fine and Applied Arts	17.83	27.72	11.91	4.10	61.56	4.17	18.61	5.21	10.44	141.00
Physical Sciences	56.72	16.75	7.70	5.36	79.56	2.73	11.60	1.79	5.39	99.00
Health Professions	—	—	—	—	—	—	—	—	—	—
Human Sciences	11.66	47.90	8.52	8.22	74.31	8.21	7.46	3.26	8.76	46.00
Humanities	—	—	—	—	—	—	—	—	—	—
Language	34.04	22.68	6.87	5.19	66.10	7.89	13.02	4.61	8.46	95.00
Library Science	0.55	15.62	32.98	3.32	52.46	8.87	1.31	23.18	4.18	20.50
Mathematics	20.69	18.01	6.47	8.83	60.00	2.76	24.92	1.84	6.40	88.00
Natural Sciences	18.42	18.54	7.30	12.30	54.57	3.04	32.62	2.11	7.62	137.00
Philosophy	7.34	23.66	17.99	13.74	62.76	6.69	26.76	1.64	4.19	40.00
Social Sciences and Services	0.26	33.63	21.66	2.75	58.53	6.88	16.01	2.33	7.22	87.00
Sports Sciences	18.44	20.14	10.21	7.38	56.14	6.70	29.72	2.07	6.34	170.00
Transportation	—	—	—	—	—	—	—	—	—	—
Interdisciplinary Studies	—	—	—	—	—	—	—	—	—	—
Other Faculty	—	—	—	—	—	—	—	—	—	—
Other Faculty by Discipline	—	—	—	—	—	—	—	—	—	—
Other Faculty by Discipline	—	—	—	—	—	—	—	—	—	—

TABLE 22-3
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT FLORIDA A&M UNIVERSITY BY
DISCIPLINE, 1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction					Academic Counseling (percent)	Research (percent)	Public Service (percent)	Academic Administration (percent)	Total FTE (faculty)
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Instruction (percent)					
Agricultural and Natural Resources	48.18	50.80	-----	-----	59.09	3.63	10.08	-----	28.18	11.00
Architecture and Environmental Design	8.25	9.23	-----	-----	18.46	81.63	-----	-----	-----	1.00
Arts Studies	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Business Studies	67.50	28.66	-----	-----	84.16	12.50	-----	1.66	6.00	-----
Business and Management	27.93	50.56	-----	-----	78.11	-----	-----	21.88	24.00	-----
Communications	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Computer and Information Science	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Education	11.43	40.67	18.99	-----	70.00	2.61	8.70	-----	17.67	66.00
Engineering	33.96	36.33	1.43	-----	74.76	7.39	8.96	-----	10.87	23.00
Fine and Applied Arts	42.99	44.51	-----	-----	91.42	1.07	3.21	-----	2.428	28.00
Foreign Languages	47.38	36.04	-----	-----	82.45	2.50	6.26	-----	8.77	4.00
Health Professions	10.76	30.67	-----	-----	81.43	3.12	7.90	-----	7.63	27.00
Home Economics	22.17	62.71	8.73	-----	80.62	9.76	0.93	-----	8.68	6.00
Law	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Letters	50.51	27.21	19.74	-----	88.70	3.06	3.63	-----	4.70	21.00
Library Sciences	-----	87.23	7.53	-----	74.87	2.61	2.61	-----	20.10	2.00
Mathematics	58.23	30.35	6.44	-----	97.33	2.00	-----	-----	0.68	15.00
Physical Science	42.86	49.06	-----	-----	88.71	-----	5.12	-----	8.16	10.00
Psychology	14.20	62.91	10.30	-----	87.12	8.53	1.43	-----	2.88	7.00
Public Affairs and Services	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Social Science	32.38	40.62	5.57	-----	80.09	3.13	2.60	-----	14.26	32.00
Technology	9.37	9.37	-----	-----	18.75	-----	-----	-----	81.25	-----
Transdisciplinary Studies	-----	19.00	-----	-----	10.69	-----	-----	-----	80.30	1.00
Net Reported by Discipline	-----	-----	-----	-----	46.6	8.66	-----	46.66	6.00	-----

Less than 0.5 FTE

Sources: Same as Table 1.

TABLE 22-4
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT THE UNIVERSITY OF SOUTH FLORIDA BY
DISCIPLINE, 1974-75 ACADEMIC YEAR

DISCIPLINE	Percent of FTE Faculty Positions Committed to						Academic Administration (percent)	Public Service (percent)	Research (percent)	Academic Counseling (percent)	Total Instruction (percent)	Advanced Graduate (percent)	Upper Level (percent)	Lower Level (percent)
	Instruction	Research	Academic Counseling	Public Service	Academic Administration	Total Instruction								
Area Studies	65.49	—	—	—	—	70.39	9.21	8.23	4.11	8.03	5.00	—	—	—
Biological Studies	19.95	17.28	2.38	60.68	4.89	18.46	3.62	12.32	49.00	—	—	—	—	—
Business and Management	56.43	10.08	—	78.88	5.72	5.93	1.80	7.64	109.00	—	—	—	—	—
Communications	7.34	—	—	77.34	7.99	2.99	2.36	9.27	18.00	—	—	—	—	—
Computer and Information Science	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Education	3.84	44.91	26.90	0.83	76.69	7.25	5.24	2.93	7.86	203.00	—	—	—	—
Engineering	5.28	44.09	18.54	0.29	88.21	6.76	10.83	3.64	10.53	86.00	—	—	—	—
Fine and Applied Arts	18.74	38.18	9.13	—	64.06	2.04	19.69	3.50	10.69	80.00	—	—	—	—
Foreign Languages	43.19	26.31	12.82	—	82.33	1.54	11.44	—	4.67	24.00	—	—	—	—
Health Professions	—	67.83	—	9.09	76.92	3.49	—	—	19.58	1.00	—	—	—	—
Home Economics	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Letters	19.88	24.74	9.06	1.17	74.87	4.05	10.67	1.24	8.67	107.00	—	—	—	—
Literary Science	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mathematics	27.20	27.22	8.73	0.90	64.06	2.38	26.63	0.90	5.80	39.00	—	—	—	—
Physical Sciences	23.63	30.37	9.87	3.23	67.11	1.66	19.67	4.30	7.23	71.00	—	—	—	—
Psychology	4.06	28.36	13.87	7.14	53.43	4.17	26.49	6.66	9.21	34.00	—	—	—	—
Public Affairs and Services	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Social Sciences	13.09	38.01	15.42	0.02	65.55	6.83	12.89	4.43	10.27	140.00	—	—	—	—
Technology	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Interdisciplinary Studies	—	—	100.00	—	100.00	—	—	—	—	1.00	—	—	—	—
Not Specified by Discipline	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Source: Same as Table 1.

TABLE 22-5
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT FLORIDA ATLANTIC UNIVERSITY BY DISCIPLINE
DISCIPLINE: 1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction				Academic Counseling (percent)	Total Instruction (percent)	Research (percent)	Public Service (percent)	Academic Administration (percent)	Total FTE (Faculty)
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)						
Agricultural and Natural Resources	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Architecture and Environmental Design	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Area Studies	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Biological Studies	43.28	16.55	-----	-----	59.84	5.27	19.68	3.67	11.52	16.00
Business and Management	57.75	10.72	-----	-----	68.47	5.43	6.23	1.83	18.01	51.00
Communications	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Computer and Information Sciences	38.27	1.16	-----	-----	87.44	4.18	2.79	-----	5.68	4.00
Education	52.91	26.60	-----	-----	79.52	5.78	2.87	6.68	5.16	86.00
Engineering	56.39	9.21	-----	-----	65.80	4.32	19.88	0.79	9.58	21.00
Fine and Applied Arts	85.45	2.20	-----	-----	87.65	2.13	5.77	1.47	2.96	29.00
Foreign Languages	74.07	20.50	-----	-----	94.58	2.18	1.16	0.23	1.84	9.00
Health Professions	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Home Economics	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Law	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Letters	71.19	12.06	-----	-----	83.24	5.09	7.81	-----	3.71	15.00
Library Sciences	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Mathematics	51.51	13.20	-----	-----	64.92	5.10	2.31	0.95	8.23	12.00
Physical Sciences	66.08	7.27	-----	-----	73.37	2.47	10.09	0.19	8.26	26.00
Psychology	66.83	10.01	-----	-----	76.85	2.50	13.30	1.38	5.78	12.00
Public Affairs and Services	50.39	20.87	-----	-----	74.27	6.08	11.16	0.44	8.00	4.00
Social Sciences	62.90	11.31	-----	-----	74.21	4.98	14.21	0.84	6.75	36.00
Technology	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Interdisciplinary Studies	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Not Reported by Discipline	-----	-----	-----	-----	6.72	8.73	5.35	78.10	23.00	-----

Sources: Same as Table 1.

TABLE 22-6
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT THE UNIVERSITY OF WEST FLORIDA BY
DISCIPLINE, 1974-75 ACADEMIC YEAR

DISCIPLINE	Instruction						Academic Consulting (percent)	Research (percent)	Public Service (percent)	Academic Administration (percent)	Total FTE (faculty)
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Institution (percent)						
Agricultural and Natural Resources	54.06	32.42	—	—	86.48	7.04	1.90	0.41	4.14	12.00	
Architecture and Environmental Design	58.54	19.86	—	—	88.40	5.75	0.71	0.05	5.06	36.00	
Art Studies	72.55	8.33	—	—	80.89	6.03	4.74	1.14	7.18	7.00	
Business and Management	64.22	15.23	—	—	79.45	5.98	7.78	0.56	6.20	9.00	
Communications	64.82	21.52	—	—	86.34	5.85	2.17	1.58	3.84	63.00	
Computer and Information Science	—	—	—	—	—	—	—	—	—	—	
Education	—	—	—	—	—	—	—	—	—	—	
Engineering	—	—	—	—	—	—	—	—	—	—	
Fine and Applied Arts	79.06	—	—	—	79.06	6.77	6.21	—	7.05	18.00	
Foreign Languages	89.19	—	—	—	89.19	6.36	—	—	2.43	8.00	
Health Professions	—	—	—	—	—	—	—	—	—	—	
Home Economics	—	—	—	—	—	—	—	—	—	—	
Law	—	—	—	—	—	—	—	—	—	—	
Literary Studies	69.39	14.14	—	—	83.53	6.58	1.87	0.97	7.03	13.00	
Mathematics	63.80	23.76	—	—	87.28	5.97	—	—	6.76	13.00	
Physical Science	40.84	32.08	—	—	72.63	7.41	10.74	0.84	8.26	20.00	
Psychology	59.50	45.33	—	—	84.92	4.37	2.95	—	7.74	17.00	
Public Affairs and Services	90.24	—	—	—	90.24	2.60	—	—	1.73	5.01	
Social Science	60.22	19.42	—	—	79.85	6.94	5.46	—	8.03	36.00	
Technology	—	—	—	—	—	—	—	—	—	—	
Interdisciplinary Studies	64.84	—	—	—	86.84	—	—	—	15.18	16.00	
Net Reported by Discipline	—	—	—	—	—	—	—	—	10.44	80.00	

Sources: Same as Table 1.

TABLE 22-7
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT FLORIDA TECHNOLOGICAL UNIVERSITY BY
DISCIPLINE, 1974-75 ACADEMIC YEAR.

DISCIPLINE	Instruction				Academic Counseling (percent) ^a	Research (percent)	Public Service (percent)	Academic Administration (percent)	Total FTE (faculty)
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)					
Agricultural and Natural Resources	—	—	—	—	—	—	—	—	—
Architecture and Environmental Design	—	—	—	—	—	—	—	—	—
Arts Studies	—	—	—	—	—	—	—	—	—
Biological Studies	20.87	34.20	9.53	—	64.41	10.87	9.27	8.09	7.24
Business and Management	8.04	52.44	8.68	—	50.17	9.56	4.17	3.76	13.33
Communications	22.44	58.87	13.70	—	65.02	1.15	0.46	—	3.35
Computer and Information Science	11.78	43.34	34.60	—	89.73	3.04	—	3.04	4.18
Education	2.08	45.82	19.94	—	67.95	6.48	0.63	11.72	10.99
Engineering	9.68	44.33	19.00	—	73.02	5.39	5.79	4.42	11.35
Fine and Applied Arts	28.79	63.18	2.77	—	84.76	4.76	1.97	3.78	4.98
Foreign Languages	53.09	32.66	—	—	85.78	1.16	—	—	8.37
Health Professions	—	73.77	0.65	—	73.42	7.21	—	3.44	14.91
Home Economics	—	—	—	—	—	—	—	—	—
Law	—	—	—	—	—	—	—	—	—
Literary Studies	22.48	46.09	6.63	—	84.11	4.01	0.91	5.17	5.78
Mathematics	32.29	50.89	7.73	—	90.91	3.38	0.43	0.95	4.60
Physical Science	28.61	46.27	—	—	75.39	4.84	8.61	3.55	7.59
Psychology	13.30	34.51	22.41	—	70.24	4.18	12.78	5.27	7.51
Public Affairs and Services	—	—	93.18	—	93.18	6.81	—	—	—
Social Sciences	12.79	55.24	8.20	—	74.24	10.63	1.66	2.50	11.05
Technology	—	—	—	—	—	—	—	—	—
Interdisciplinary Studies	8.33	—	—	—	—	6.33	36.38	—	12.12
Not Reported by Discipline	—	—	—	—	—	8.92	4.96	11.88	76.22

^a Less than 0.5 FTE
Source: Same as Table 1.

TABLE 22-8
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT FLORIDA INTERNATIONAL UNIVERSITY BY
DISCIPLINE, 1974-75 ACADEMIC YEAR

DISCIPLINE	Percent of FTE Faculty Positions Committed to										Total FTE (Faculty)
	Instruction			Research			Public Service (percent)			Academic Administration (percent)	
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Institution (percent)	Academic Counseling (percent)	Research (percent)	Public Service (percent)	Academic Administration (percent)		
Agricultural and Natural Resources	—	—	—	—	—	—	—	—	—	—	—
Architecture and Environmental Design	—	—	—	—	—	—	—	—	—	—	—
Area Studies	—	—	—	—	—	—	—	—	—	—	—
Biological Studies	65.70	—	—	65.70	6.34	11.29	4.06	12.78	10.00	—	—
Business and Management	51.67	18.80	—	70.48	8.61	8.59	3.68	8.42	82.00	—	—
Communications	34.37	—	—	34.37	—	—	—	—	—	85.62	—
Computer and Information Science	12.30	—	—	12.30	—	12.30	4.61	70.76	1.00	—	—
Education	46.57	24.92	—	71.50	6.77	1.73	5.50	14.48	77.00	—	—
Engineering	—	—	—	—	—	—	—	—	—	—	—
Fine and Applied Arts	73.16	1.68	—	74.85	5.22	7.89	5.33	6.69	18.00	—	—
Foreign Languages	75.91	—	—	75.91	7.55	6.89	1.24	8.38	12.00	—	—
Health Professions	57.43	1.32	—	58.96	9.95	2.31	8.72	20.04	31.00	—	—
Home Economics	58.53	23.97	—	82.51	6.50	1.26	2.96	7.76	7.00	—	—
Law	—	—	—	—	—	—	—	—	—	—	—
Literature	58.91	4.19	—	82.74	6.82	10.02	3.04	16.00	19.00	—	—
Library Science	—	—	—	—	—	—	—	—	—	—	—
Mathematics	75.42	0.25	—	75.68	5.74	7.86	3.05	8.22	19.00	—	—
Physical Science	66.75	—	—	66.75	3.96	13.44	3.13	12.79	11.00	—	—
Psychology	64.42	1.53	—	66.95	7.67	11.24	3.90	11.32	13.00	—	—
Public Affairs and Services	64.61	1.66	—	66.27	12.61	3.38	8.22	8.56	18.00	—	—
Social Science	63.23	2.46	—	65.80	7.96	8.38	5.04	13.20	39.00	—	—
Technology	70.11	1.02	—	71.14	8.71	2.78	4.47	14.88	27.00	—	—
Interdisciplinary Studies	17.38	—	—	17.38	43.96	1.28	8.58	29.18	6.00	—	—
Not Reported by Discipline	—	—	—	—	12.98	6.98	24.39	55.63	21.00	—	—

*Less than 0.5 FTE
Source: Same as Table 1.

TABLE 22-9
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT THE UNIVERSITY OF NORTH FLORIDA
BY DISCIPLINE, 1974-75 ACADEMIC YEAR

DISCIPLINE	Percent of FTE Faculty Positions Committed to						Academic Administration (percent)	Public Service (percent)	Research (percent)	Academic Counseling (percent)	Total Instruction (percent)	Advanced Graduate Placement (percent)	Beginning Graduate (percent)	Upper Level (percent)	Lower Level (percent)
	Instruction	Instruction	Instruction	Instruction	Instruction	Instruction									
Agricultural and Natural Resources	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architecture and Environmental Design	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Area Studies	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Biological Studies	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Business and Management	53.79	17.21	—	—	—	—	71.00	9.35	2.36	0.61	16.65	41.00	—	—	—
Communications	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Computer and Information Science	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Education	38.68	31.88	—	—	—	—	71.57	8.00	1.87	1.11	17.42	64.00	—	—	—
Engineering	—	—	—	—	—	—	—	—	24.24	—	—	76.76	—	—	—
Fine and Applied Arts	72.77	—	—	—	—	—	72.77	4.74	0.28	0.28	21.91	11.00	—	—	—
Foreign Languages	—	—	—	—	—	—	—	100.00	—	—	—	—	—	—	—
Health Professions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Economics	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Letters	61.80	11.08	—	—	—	—	72.90	6.45	5.16	0.12	15.35	8.00	—	—	—
Library Science	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mathematics	74.73	—	—	—	—	—	74.73	5.93	—	1.06	18.28	8.00	—	—	—
Physical Science	69.08	—	—	—	—	—	69.08	5.86	5.06	0.60	21.17	10.00	—	—	—
Psychology	45.39	23.92	—	—	—	—	69.32	10.81	—	0.92	18.94	13.00	—	—	—
Public Affairs and Services	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Social Science	61.88	3.52	—	—	—	—	65.40	10.31	3.71	1.00	19.55	18.00	—	—	—
Technology	—	—	—	—	—	—	—	—	—	—	—	100.00	—	—	—
Interdisciplinary Studies	—	—	—	—	—	—	—	15.00	—	—	—	85.00	1.00	—	—
Not Reported by Discipline	—	—	—	—	—	—	—	—	4.22	—	16.62	79.15	7.00	—	—

*Less than 0.5 FTE

Sources: Same as Table 1

TABLE 23-1
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT THE UNIVERSITY OF FLORIDA BY
DISCIPLINE, 1973-74 ACADEMIC YEAR

DISCIPLINE	Percent of FTE Faculty Positions Committed to						Academic Counseling (percent)	Research (percent)	Public Service (percent)	Administrative (percent)	Total FTE Faculty
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Instruction (percent)						
Agriculture and Natural Resources	—	21.07	30.65	—	51.72	3.63	33.71	—	10.72	3	64
Architecture and Environmental Design	14.66	52.79	10.08	6.14	77.72	3.90	8.05	1.81	9.30	—	86
Area Studies	1.31	7.60	9.30	2.75	20.96	5.89	38.53	9.43	25.16	—	8
Biological Studies	22.47	21.81	8.97	4.98	58.05	2.94	26.65	2.81	9.34	—	86
Business and Management	9.76	29.90	12.97	3.60	56.23	6.04	28.88	1.75	7.06	124	7
Communication	5.70	48.86	3.00	6.69	58.35	7.33	2.24	1.50	29.56	45	45
Computer and Information Science	—	68.74	—	—	60.00	4.37	16.29	—	10.33	—	8
Education	13.90	40.03	23.08	2.60	79.73	3.98	8.58	7.1	7.08	—	202
Engineering	1.70	34.96	17.14	6.54	60.45	3.69	20.93	.69	14.02	—	184
Fine and Applied Arts	36.18	42.98	5.03	1.75	84.96	1.61	3.46	6.0	9.35	—	54
Foreign Languages	50.87	17.66	7.55	1.67	77.57	3.29	16.14	.52	2.45	—	48
Health Professions	—	—	—	—	—	—	—	—	—	—	—
Home Economics	—	—	—	—	—	—	—	—	—	—	—
Law	—	—	22	61.31	10	61.64	8.30	14.21	3.92	13.90	48
Lettres	44.22	23.29	10.47	1.52	79.52	4.87	8.10	1.33	6.16	468	—
Library Science	—	—	—	—	—	—	—	—	—	—	—
Mathematics	16.24	51.76	15.31	5.64	82.86	2.25	12.04	—	2.83	84	—
Physical Science	43.58	14.50	7.72	5.46	71.27	2.54	18.11	.49	7.57	145	—
Physiology	3.98	37.56	18.98	15.32	75.57	6.68	14.14	1.40	2.18	—	36
Public Affairs and Services	—	—	—	—	—	—	—	—	—	—	—
Social Science	29.32	24.76	11.53	5.18	70.81	4.37	18.11	.97	5.72	128	—
Technology	—	—	—	—	—	—	—	—	—	—	—
Interdisciplinary Studies	33.19	1.10	—	—	34.30	1.47	1.94	38.96	23.31	77	—
Not Recepted by Discipline	1.49	7.52	4.26	—	13.00	26.17	64.07	26.04	70.68	43	—

Source: Same as Table 1.

TABLE 23-2
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT FLORIDA A & M UNIVERSITY BY
DISCIPLINE, 1973-74 ACADEMIC YEAR

DISCIPLINE	Percent of FTE Faculty Positions Committed to						Academic Counseling (percent)	Research (percent)	Public Service (percent)	Administrative (percent)	Total FTE (Faculty)					
	Instruction			Advanced Graduate (percent)	Total Instruction (percent)											
	Lower Level (percent)	Upper Level (percent)	Beginning (percent)													
Agricultural and Natural Resources	36.88	35.70	70	70	73.29	2.54	7.44	.04	16.67	21						
Architecture and Environmental Design																
Area Studies																
Biological Studies	61.12	9.67	2		70.79	4	22.82		6.38	5						
Business and Management	52.99	35.85	35		89.20	77	5.87		4.13	17						
Communications																
Computer and Information Sciences																
Education	50.67	21.04	6.38		78.10	2.65	5.84	.38	13.01	52						
Engineering	39.68	31.61	1.83		73.13	5.35	2.03	1.35	18.11	15						
Fine and Applied Arts	58.93	31.23			90.16	50	2.27		7.06	20						
Foreign Languages	40.50	36.31	4.98		81.80	9.3	5.63	.93	10.68	14						
Health Professions	28.07	54.31			82.59	1.37	10.34	.85	4.84	15						
Home Economics	62.60	16.80	3.57		82.98			.86	3.40	5						
Law																
Literature	64.83	19.57	2		87.12	4.51	2.25		-6.09	13						
Library Science	51.13	29.41	31.22		71.94	4.07	.45	.94	14.47	2						
Mathematics	71.64	15.24			86.88			.85	3.10	12.16	9					
Physical Sciences	64.28	16.80	7.42		88.51		9.24		2.24	7						
Psychology	30.54	44.19	6.10		80.85	6.72	4.0		12.01	5						
Public Affairs and Services	38.02	43.68	7.22		88.92	.72	3.12		7.22	8						
Social Sciences	54.56	26.20	1.77		81.55	3.85	.53	1.30	12.75	17						
Technology																
Interdisciplinary Studies	19.69				19.69				30.30	1						
Not Reported by Discipline	30.85	44.13	3.82		78.81	4.32	5.12		11.64	78						

Source: Same as Table 1.

TABLE 23-3
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT THE UNIVERSITY OF SOUTH FLORIDA BY
DISCIPLINE, 1973-74 ACADEMIC YEAR

DISCIPLINE	Percent of FTE Faculty Positions Committed to						Academic Gounding (percent)	Research (percent)	Public Service (percent)	Academic Administration (percent)	Total FTE (Faculty)
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Instruction (percent)						
Agricultural and Natural Resources	—	—	—	—	—	—	—	—	—	—	—
Architecture and Environmental Design	—	—	—	—	—	—	—	—	—	—	—
Area Studies	.20	81.82	—	—	—	—	—	—	—	—	—
Biological Studies	23.18	21.12	18.75	1.47	64.54	3.29	23.61	2.56	5.97	51	—
Business and Management	14.27	56.48	9.04	.69	80.49	6.00	4.86	2.30	6.24	112	—
Communications	—	67.24	9.26	—	76.50	8.31	—	—	16	15.01	18
Computer and Information Science	—	—	—	—	—	—	—	—	—	—	—
Education	4.41	42.02	27.98	.40	74.82	8.01	6.16	3.10	7.87	183	—
Engineering	5.25	36.61	23.18	.36	65.42	6.04	17.58	3.69	7.25	55	—
Fine and Applied Arts	19.12	33.90	17.64	—	70.68	2.49	15.34	3.36	8.13	76	—
Foreign Languages	49.25	31.14	14.69	—	95.09	1.34	63	—	2.95	26	—
Health Professions	—	68.14	—	—	68.14	18.27	—	—	5.74	7.83	4
Home Economics	—	—	—	—	—	—	—	—	—	—	—
Law	—	—	—	—	—	—	—	—	—	—	—
Lettres	18.82	47.60	14.16	1.08	81.69	4.61	7.00	1.88	4.80	84	—
Literary Science	—	—	—	—	—	—	—	—	—	—	—
Mathematics	30.01	31.89	11.13	1.19	74.23	3.78	17.24	4.3	4.29	39	—
Physical Sciences	21.72	30.15	17.36	1.11	70.35	2.95	18.01	2.37	6.69	66	—
Psychology	6.48	30.24	14.55	3.56	54.05	10.46	25.63	3.53	6.31	31	—
Public Affairs and Services	—	—	—	—	—	—	—	—	—	—	—
Seasol Sciences	15.02	41.96	17.42	.31	74.55	2.62	6.53	3.10	8.19	128	—
Technology	—	—	—	—	—	—	—	—	—	—	—
Interdisciplinary Studies	—	—	—	—	—	—	—	—	—	—	—
Net Reported by Discipline	3.12	3.30	.47	.05	6.96	17.32	2.41	9.97	63.32	51	—

Source: Same as Table 1.

TABLE 23-4
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT THE UNIVERSITY OF WEST FLORIDA BY
DISCIPLINE, 1973-74 ACADEMIC YEAR

DISCIPLINE	Percent of FTE Faculty Positions Committed to						Academic Counseling (percent)	Research (percent)	Public Service (percent)	Academic Administration (percent)	Total FTE (Faculty)
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Instruction (percent)						
Agricultural and Natural Resources	56.39	29.62	—	—	86.01	6.90	2.84	17	4.05	12	—
Architecture and Environmental Design	—	—	—	—	86.50	6.37	1.74	—	5.37	37	—
Area Studies	—	—	—	—	77.55	8.01	—	—	5.00	9.44	7
Biological Studies	65.32	21.18	—	—	—	—	—	—	—	—	—
Business and Management	77.25	20.78	—	—	—	—	—	—	—	—	—
Communications	71.41	15.72	—	—	87.14	6.42	2.22	22	5.97	9	—
Computer and Information Science	67.23	20.76	—	—	88.00	6.36	1.20	25	4.28	59	—
Education	—	—	—	—	—	—	—	—	—	—	—
Engineering	62.70	—	—	—	82.70	6.93	1.36	91	8.07	18	—
Fine and Applied Arts	90.60	—	—	—	90.60	8.83	—	—	5.55	—	4
Foreign Languages	—	—	—	—	—	—	—	—	—	—	—
Human Relations	—	—	—	—	—	—	—	—	—	—	—
Home Economics	—	—	—	—	—	—	—	—	—	—	—
Law	—	—	—	—	—	—	—	—	—	—	—
Letters	66.84	11.98	—	—	78.82	6.70	5.35	7.30	8.51	13	—
Library Science	—	—	—	—	—	—	—	—	—	—	—
Mathematics	62.43	22.80	—	—	85.24	5.20	3.94	5.15	5.44	13	—
Physical Science	42.87	33.21	—	—	76.09	7.12	6.48	4.48	9.80	21	—
Psychology	42.31	45.26	—	—	87.53	5.62	1.23	—	5.55	15	—
Public Affairs and Services	81.30	—	—	—	81.39	6.05	4.99	—	7.56	7	—
Social Science	57.56	16.83	—	—	74.39	6.08	11.21	—	8.30	26	—
Technology	—	—	—	—	—	—	—	—	—	—	—
Interdisciplinary Studies	—	—	—	—	—	—	—	—	—	—	—
Not Reported by Discipline	34.76	1.03	—	—	35.79	2.63	3.82	10.36	147.35	17	—

Source: Same as Table I

TABLE 23-5
PERCENT DISTRIBUTION OF FULL-TIME EQUIVALENT FACULTY POSITIONS
COMMITTED BY TASK AT FLORIDA TECHNOLOGICAL UNIVERSITY BY
DISCIPLINE, 1973-74 ACADEMIC YEAR

DISCIPLINE	Instruction						Academic Counseling (percent)	Research (percent)	Public Service (percent)	Academic Administrators (percent)	Total FTE (Faculty)
	Lower Level (percent)	Upper Level (percent)	Beginning Graduate (percent)	Advanced Graduate (percent)	Total Instruction (percent)						
Agriculture & Natural Resources	—	—	—	—	—	—	—	—	—	—	—
Architecture & Environmental Design	—	—	—	—	—	—	—	—	—	—	—
Area Studies	—	—	—	—	—	—	—	—	—	—	—
Biological Studies	22.77	38.46	12.33	—	73.54	7.82	5.11	5.69	7.82	17	—
Business and Management	9.69	54.05	8.19	23	72.17	7.83	6.95	3.89	9.14	43	—
Communications	18.73	54.37	14.20	1.54	88.49	75	1.83	53	8.36	19	—
Computer & Information Science	3.08	54.92	14.49	27	69.58	8.22	1.21	8.69	12.27	58	—
Education	9.54	42.83	20.28	31	73.47	5.42	6.61	4.35	10.12	34	—
Engineering	35.73	47.40	.44	—	87.58	3.69	2.19	1.98	4.54	25	—
Fine and Applied Arts	53.09	34.33	—	—	87.43	4.07	—	—	8.49	6	—
Foreign Languages	—	—	—	—	—	—	—	—	—	—	—
Health Professions	1.83	66.11	—	—	67.94	10.25	—	4.94	16.84	5	—
Home Economics	—	—	—	—	—	—	—	—	—	—	—
Law	—	—	—	—	—	—	—	—	—	—	—
Letters	31.18	45.57	5.77	—	82.48	3.46	.44	3.28	9.12	25	—
Library Science	—	—	—	—	—	—	—	—	—	—	—
Mathematics	31.66	52.46	6.02	—	90.15	4.04	1.10	1.79 _{4b}	2.89	26	—
Physical Science	32.60	41.33	67	—	75.11	4.50	8.78	3.04	8.55	18	—
Psychology	14.70	33.87	22.21	—	70.79	6.80	8.61	4.14	9.65	15	—
Public Affairs and Services	—	—	—	—	—	—	—	—	—	—	—
Social Science	10.15	60.58	7.29	—	78.04	9.79	1.64	2.36	8.15	28	—
Technology	—	—	—	—	—	—	—	—	—	—	—
Interdisciplinary Studies	—	—	—	—	—	—	—	—	—	—	—
Not Reported by Discipline	1.66	9.11	2.28	—	13.05	6.71	19.96	4.96	55.28	43	—

Sources: Same as Table 1.

APPENDIX 3

SELECTED BIBLIOGRAPHY

Astin, Alexander, W., "Measurement and Determinants of the Outputs of Higher Education," in Lewis C. Solomon and Paul J. Tankman, eds., Does College Matter?, New York: Academic Press, 1973.

Averch, H., et al., "What Do We Know About Educational Effectiveness?" Santa Monica: Rand Corporation, 1970.

Ayer, Fred C., "How the Teaching Load is Handled in State and Other Universities," The Nation's Schools, Vol. II, Number 6, June, 1929.

Baker, Robert Osborne, "The Faculty Service Load," American Association of Collegiate Registrars, Journal, 18: (October, 1942): pp. 57-65.

Balfour, W. Campbell, "The Academic Working Week," University Quarterly, Vol. 24, August, 1970.

Banks, Jerry, An Investigation of Methods for Determining Faculty Loads, University: Unpublished Master's Thesis, University of Alabama, 1963.

Bayer, Alan E., Teaching Faculty in Academe: 1972-73, Washington: American Council on Education, ACE Research Reports, Vol. 18, No. 2, August, 1973.

Behrens, Ann Jo. W., Higher Education with Fewer Teachers: Some Examples of Current Practice, Washington: Academy for Educational Development, Inc., October, 1972.

Bowen, Howard R. and Douglass, Gordon K., Efficiency in Liberal Education, New York: McGraw-Hill, 1971.

Blackburn, Robert T. and Trowbridge, Keith W., Faculty Accountability and Faculty Workload: A Preliminary Cost Analysis of their Relationship as Revealed by Ph.D. Productivity, Ann Arbor: Center for the Study of Higher Education, 1972.

Breneman, David, The Stability of Faculty Input Coefficients in Linear Workload Models at the University of California, Berkeley: Ford Foundation Program for Research in University Administration, April, 1969.

Buckler, William, et al., Faculty Teaching Loads in Colleges and Universities, New York: Association of Departments of English, February, 1968.

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Astin, Alexander, W., "Measurement and Determinants of the Outputs of Higher Education," in Lewis C. Solomon and Paul J. Tankman, eds., Does College Matter?, New York: Academic Press, 1973.

Averch, H., et al., "What Do We Know About Educational Effectiveness?" Santa Monica: Rand Corporation, 1970.

Ayer, Fred C., "How the Teaching Load is Handled in State and Other Universities," The Nation's Schools, Vol. II, Number 6, June, 1929.

Baker, Robert Osborne, "The Faculty Service Load," American Association of Collegiate Registrars, Journal, 18: (October, 1942): pp. 57-65.

Balfour, W. Campbell, "The Academic Working Week," University Quarterly, Vol. 24, August, 1970.

Banks, Jerry, An Investigation of Methods for Determining Faculty Loads, University: Unpublished Master's Thesis, University of Alabama, 1963.

Bayer, Alan E., Teaching Faculty in Academe: 1972-73, Washington: American Council on Education, ACE Research Reports, Vol. 18, No. 2, August, 1973.

Behrens, Ann Jo. W., Higher Education with Fewer Teachers: Some Examples of Current Practice, Washington: Academy for Educational Development, Inc., October, 1972.

Bowen, Howard R. and Douglass, Gordon K., Efficiency in Liberal Education, New York: McGraw-Hill, 1971.

Blackburn, Robert T. and Trowbridge, Keith W., Faculty Accountability and Faculty Workload: A Preliminary Cost Analysis of their Relationship as Revealed by Ph.D. Productivity, Ann Arbor: Center for the Study of Higher Education, 1972.

Breneman, David, The Stability of Faculty Input Coefficients in Linear Workload Models of the University of California, Berkeley: Ford Foundation Program for Research in University Administration, April, 1969.

Buckler, William, et al., Faculty Teaching Loads in Colleges and Universities, New York: Association of Departments of English, February, 1968.

Bennett, Kevin, ed., Faculty Work Load, Washington: The American Council on Education, 1960.

Byers, Maureen, Information Exchange Procedures Outcomes Study Procedures, Boulder: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, Technical Report No. 66, February, 1975.

Carlson, Daryl E., The Production and Cost Behavior of Higher Education Institutions, Berkeley: Ford Foundation Program for Research in University Administration, December, 1972.

Clark, David G., Huff, Robert A., Haight, Michael J. and Collard, William J., Introduction to the Resource Requirements Prediction Model 1.6, Boulder: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, Technical Report No. 34A, 1973.

Collard, William and Huff, Robert, Exploring Cost Exchange at Colleges and Universities, Boulder: Western Interstate Commission for Higher Education, A Report on the 1973 Field Test of the National Center for Higher Education Management Systems' Preliminary Information Exchange and Reporting Procedures at 70 Institutions, 1974.

Gaff, Jerry G. and Wilson, Robert C., "The Teaching Environment," AAUP Bulletin, Vol. 57, No. 4, Winter, 1971.

Gulko, Warren W. and Hussain, K. M., A Resource Requirements Prediction Model (RRPM-1): An Introduction to the Model, Boulder: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, National Center for Higher Education Management Systems Technical Report 19, October, 1971.

Haight, Mike and Martin, Ron, National Center for Higher Education Management Systems Costing and Data Management System Student Data Module Reference Manual, Boulder: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, Technical Report No. 60, January, 1975.

Hodgkinson, Harold L., "Open Access - A Clue to Reformation and Reallocation" in Clifford T. Stewart, ed., Reformation and Reallocation in Higher Education, Washington: Association of Institutional Research, 12th Annual Forum, 1972.

Implementation of National Center for Higher Education Management Systems Planning and Management Tools at California State University, Fullerton; Boulder: National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education, August, 1972.

Johnson, Axel, "The Teaching Load of College Chemistry Instructors," p. 103 Journal of Chemical Education, Vol. 8, No. 1, January, 1931.

Katz, David A., "Faculty Salaries, Promotions, and Productivities at a Large University," American Economic Review, Vol. 63, No. 3, June, 1973, pp. 469-477.

Kieft, Raymond N., "Faculty Planning Parameters: A Shared Responsibility," College and University, Vol. 50, No. 3, Spring, 1975.

Lee, Maw Lin, Stevens, David W., Wallace, Richard L., "A Conspicuous Production Theory of Resource Allocation in Higher Education," Higher Education, 4, 1975, pp. 77-86.

Levin, H. M., Concepts of Economic Efficiency and Educational Production, New York: National Bureau of Economic Research, 1971.

Lumsden, Keith G., ed., Efficiency in Universities: The La Paz Papers, New York: Elsevier, 1974.

Maeda, Paul F., Nicholson, Everard, and Brown, Eric, "Resource Optimization in a Private Institution — A Case Study in Institutional Planning," in Clifford T. Stewart, ed., Reformation and Reallocation in Higher Education, Washington: Association of Institutional Research, 12th Annual Forum, 1972.

Micek, Sidney S. and Arney, William Ray, The Higher Education Outcome Measures Identification Study, A Descriptive Summary, Boulder: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, November, 1974.

Micek, Sidney S., Wallhouse, Robert A., An Introduction to the Identification and Uses of Higher Education Outcome Information, Boulder: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, Technical Report 40, 1973.

Minter, W. John, Higher Education Faculty and Staff Assignment Classification Manual, Boulder: The National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, Preliminary Field Review Edition, June, 1971.

"Report of Committee on Teaching Load in Colleges," North Central Association Quarterly, 4; September, 1929.

O'Neill, June, Resource Use in Higher Education, Berkeley: Carnegie Commission on Higher Education, 1971.

Richardson, H. D., "Faculty Work Load Study and Analysis," College and University, 43; Fall, 1967.

Romney, Leonard C., Faculty Activity Analysis: Overview and Major Issues, Boulder: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, Technical Report No. 24, December, 1971.

Romney, Leonard C. and Manning, Charles W., Faculty Activity Analysis: Interpretation and Uses of Data, Boulder: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, Technical Report No. 54, 1974.

Schietinger, E. F., ed., Introductory Papers on Institutional Research, Atlanta: Southern Regional Education Board, 1968.

Shay, John E., Jr., "Coming to Grips with Faculty Workload," Educational Record, Vol. 55, No. 1, Winter, 1974.

Sheets, Norman L., "Guidelines for Assigning College Faculty Loads," Journal of Health, Physical Education Recreation, Vol. 41, No. 7, September, 1970.

Snepp, Donald, Teaching Conditions and Loads at San Francisco City College, New York: Association of Departments of English, February, 1968.

Starr, S. Frederick, "A Fair Measure for Faculty Workloads," Educational Record, Vol. 54, No. 4, Fall, 1973.

"Statement on Faculty Workload," AAUP Bulletin, Winter, 1968.

Stecklein, John E., "Analysis of Faculty Activities," in E. F. Schietinger's, ed., Introductory Papers on Institutional Research, Atlanta: Southern Regional Education Board, 1968.

"Survey of Use of Student-Faculty Ratios for Budgeting Purposes in Higher Education," State of New York, Executive Department, Division of the Budget, mimeograph.

Toombs, William, Productivity: Burden of Success, Washington: American Association for Higher Education, 1973.

Wallhaus, Robert A., ed., Measuring and Increasing Academic Productivity, New Directions for Institutional Research, Washington: Association for Institutional Research, No. 8, Winter, 1975.

_____, "Productivity in Postsecondary Education," National Center for Higher Education Management Systems, mimeograph.

Williams, Harry, Planning for Effective Resource Allocation in Universities, Washington: American Council on Education, 1966.

Wilson, Logan and Mills, Olive, eds., Universal Higher Education, Washington: American Council on Education, 1972.

Wing, Paul, Higher Education Enrollment Forecasting, Boulder: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, A Manual for State-Level Agencies, 1974.

Wood, Kenneth, Linsky, Arnold S., and Straus, Murray A., "Class Size and Student Evaluations of Faculty," Journal of Higher Education, Vol. XLV, No. 7, October, 1974.